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ORIGINAL LECTURES.

CLINICAL LECTURE

ON HYSTERO-EPILEPSY AND HYSTERICAL RHYTHMICAL CHOREA.

Delivered in the Hospital of the University of Pennsylvania, January 14, 1881,

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Reported by Dr. CHARLES K. MILLS, Chief of Nervous Clinic.

THE patient is a girl nearly 17 years old. Her mother is living and well. Her father died fifteen years ago after a "paralytic stroke." She has brothers living and in good health. Four brothers are dead: two died of consumption, one of intussusception, and the fourth was drowned. The girl was well until she was thirteen years of age. She was then attending public school, was bright of mind, and was growing fast. She began to complain of being tired and of "lumps in her throat," and became afflicted with a low whining or barking cough, which lasted fully six months. It would come on about twelve o'clock every day and last until four the next morning, when she would go to sleep. This periodicity remained as long as the cough lasted. One day the cough left her, and immediately she began to have peculiar movements of her limbs, from which she has suffered ever since.

The following description may serve to convey an idea of their character. She lies in bed propped half up with pillows. Her forearms are held flexed on her arms at an angle of a little less than 90°, one hand usually near to or loosely thrown over the other. Her thighs are flexed on the pelvis at an angle of about 160°, and the legs on the thighs at an angle of 110°. The limbs, held by clonic spasm in this position, are in a state of constant rhythmical vibratory movement. The forearms move up and down over a limited area, with the hands moving inwards and slightly rotating towards the body. The thighs vibrate inwards and outwards, so that the knees sometimes strike together. The movements of the upper and lower extremities are in unison. At a number of counts they were from 110 to 120 per minute,

and the knees at each vibration moving about three inches.

During sleep the movements are stilled. It is a curious fact that before coming into the hospital she has, as a rule, gone to sleep about four in the morning, sleeping until ten or twelve o'clock, and then again beginning with the movements, just as at the first she had the cough coming and going at regular intervals.

Three months before the nervous cough came on she menstruated imperfectly, but has never since had any menses. She is a Catholic, and is religiously inclined, but has not been under any remarkable religious excitement. She has had numerous hysterical manifestations, such as spells of laughing, crying, irritability, etc.

She has been very persistently treated before coming to the hospital. During the last year she was under the care of Drs. Charles Wirgman and M. O'Hara, with Dr. Charles K. Mills as consultant. These gentlemen sent her to the hospital, hoping that therapeutic measures might be more efficient if she was removed from her home surroundings.

These are the main points in the history of this curious and unusual case. Other facts of interest will be brought out as we proceed with the examination of the patient and the discussion of her symptoms. Observe her closely. Her back is much curved; she seems unable long to hold her trunk erect without support. The muscles of the back are weak. She has the hysterical face. She constantly casts her eyes downwards. The rhythmical movements which I have described continue ceaselessly. The limbs are strongly flexed. They can, by the exertion of great force, be straightened, but the contractures at once return. When she is watched without her knowledge, the contractures remain and the movement continues, the latter, however, being usually a little more violent when she is under observation. Testing for the skin and patellar reflexes, they are found to be noticeably diminished. She is not wasted. Electro-contraction is retained.

Below the knees, as I show you, we have marked anæsthesia both to the æsthesiometer and to electricity. She does not recognize the difference between ice-cold and hot water. We have loss of sensibility as regards touch, pain, and temperature.

The anæsthesia extends to the deeper parts,—to the muscles. In the thighs it is incomplete. In the arms we have also partial anæsthesia. In reported cases of a somewhat similar character the special senses have been more or less affected. So far as we have been able to discover, no disturbance of any of the special senses has occurred.

Where does this case belong? Evidently in some of the groups of hysteria. The girl, according to her statements, has had violent epileptiform attacks. At one time during the last two years the convulsions were quite frequent. But at present she cannot be considered an hysterio-epileptic. Those of you who have attended these clinics regularly will do well to contrast the present case with that of Mrs. S., who was in our wards a few months since. Like almost all the hysterio-epileptics that I have seen, she was a fat woman, afflicted to some extent with aplepsia and constipation, but by no means badly nourished. Her attacks were usually near the time of menstruation, were very violent, and were mostly preceded by some form of gastric distress. I read from notes made upon her case by Dr. Musser, our registrar:

"When she entered the ward, heart and lungs normal. She had left-sided paralysis and anæsthesia, the tongue turning to the left. The face not paralyzed. This state followed the last convulsion. Since then she has also been having headaches. After every severe convulsion she has loss of power and of sensation of some part of the body,—a leg or an arm,—which disappears gradually or another convulsion removes it. Pressure on the ovary does not influence the convulsions, nor is there any ovarian pain or tenderness. Muscles relaxed; electro-muscular contractility good.

"In the attack, without warning or after the gastric symptoms previously noted, she would fall to the floor with tonic spasm of the muscles of the neck, the trunk, and the limbs. In a few seconds clonic spasms followed the tonic, while the respiration would be stertorous, and there would be frothing at the mouth. Consciousness would be lost with the recurrence of the tonic spasm. Sometimes this epileptiform stage, lasting from two to ten minutes, would be followed by a trance-like state, the muscles all being relaxed, the breath-

ing scarcely perceptible, the head turned to one side, the eyes closed. Often she would languidly open her eyes when spoken to or when pinched, or would give a moan, or would recognize nothing. The pupils were never dilated; the conjunctivæ sensible. Convulsive movements would often recur in the trance, which lasted from one to six hours. In about twelve or fifteen attacks, after the epileptiform seizures, tonic rigidity of the muscles of the body produced persistent opisthotonus. This stage continued a few minutes, followed by relaxation, exhaustion, and often fits of sobbing. Either a sleep from exhaustion or a fit of crying ended the attacks. During the opisthotonic stage the head would be buried into the pillow with a boring motion. After five of the severe attacks left hemiplegia and hemi-anæsthesia followed, lasting from a day to two weeks.

"Often the epileptiform seizures would be followed by slight exhaustion, from which in half an hour she would have recovered.

"Iodide of potassium was given and iodism produced, but no relief. The iodic eruption was all over the body, consisting of large, red, slightly-elevated blotches, tender and disappearing on pressure. Bromide of potassium was also given. After a violent convulsion all paralysis disappeared, and, being tired of hospital life, she was discharged.

"Some months later she returned to the hospital. Again had paralysis of left side. While in ward had one or two convulsions. Fluid extract ergot, 3ss ter die, and monobromide camphor every four hours, gave her relief. She became pregnant just before entering the house. Whether the treatment or the pregnancy relieved her is a question. At all events, the return of the convulsions at longer intervals and the abatement of their violence was the result."

Subsequently to leaving the hospital Mrs. S. became the private patient of Dr. Musser, who gives the following account of her after-history:

"During the time of carrying child, in the first month had one hysterio-epileptic attack. The three months following, had slight hysterical attacks. The last five months, had an attack (severe) of lumbo-abdominal neuralgia and of hysterical aphonia. For two weeks previous to labor suffered extremely from lumbo-abdominal pain. Twice had hysterical faints, but no convulsions. The labor was not difficult,

and was without exhaustion. About three weeks after the birth she had two brief attacks of unconsciousness, but no spasms."

It is plain that at present the case before us separates itself from such hysterical forms as were present in Mrs. S., but conforms very closely with the affection which is described by Charcot under the name of "hysterical rhythmical chorea." The physiology of such a case as this is to me a very extraordinary one. We are apt to have the idea of simulation connected with hysteria. Emotional disturbance certainly always is; but true simulation only occasionally. Ordinary chorea minor, or St. Vitus's dance, may be produced by fright from a thunderstorm or other cause. I have seen it so developed at once. Yet we do not think it simulated. Faith, fear, or other emotion will sometimes cure these cases of intensest hysteria; but this does not prove that the spasm or paralysis is a simulated phenomenon. Lie on your backs and move your legs, as this girl does, eighty times a minute backward and forward, and how long do you think that your muscular powers will suffice? Possibly twenty minutes, probably only ten. This continuous, untiring effort is one of the most extraordinary phenomena of these cases. The muscles of organic life work untiringly, continuously; but it is only in these diseased conditions that muscles of voluntary movement take on such attributes. This girl complains of no tire. An interesting point about the present case is that violent fear failed to arrest the movements. A neighbor's house was on fire; the smoke poured into this girl's chamber until there was danger of suffocation; she covered her head with the bedclothes, and the vibrations went on; her tonic spasms never relaxed. She was helpless, and seemingly would have burned alive if the conflagration had not been arrested.

Again, what is the nature of the lesions in cases like these? How can we explain the helplessness, how the vibratory movements, how the anæsthesia? I cannot answer you with any positiveness. We know only that loss of power is not always palsy, loss of sensation not always anæsthesia; or, to explain this seeming paradox, you may have loss of power, or loss of sensation, without destruction of the so-called centres or conducting tracts for motion or sensation. Let me recall here

some of the experiments of Brown-Séquard. A semi-section of the cord is made; anæsthesia is produced. Another section, lower down, causes it to disappear. A section of nerve-fibres is made near one of the cerebral ganglia, and palsy results; but on division of the pons below, the palsy passes away. Cutting the sciatic, again, causes paralysis of sensation on the opposite side. The explanation of such experiments is, that centres are inhibited by the impulses conveyed from these wounded parts.

I think that many of the phenomena of hysteria are phenomena of inhibition. Brain- or cord-centres are inhibited by an irritable ovary or uterus, or by some other source of irritation, or sometimes we have a lack of inhibition,—a want of control over ordinary functions,—and spasms and hyperæsthesia result. The shifting nature of hysteria is best explained in this way.

There is one point about the present case which I desire to call your attention to, namely, that there is no ovarian irritation, and that deep pressure produces in the ovarian region no disturbances whatever of the symptoms or patient. In many of Charcot's cases of grave hysteria, ovarian pain and tenderness have been marked features; and the professor lays great stress upon the occurrence of such symptoms, and upon the fact that firm ovarian pressure will, in hysterico-epilepsy, arrest the paroxysms. Our experience does not coincide with this. In the case of hysterico-epilepsy spoken of above, ovarian pressure did not arrest the fits; and this is our common experience.

In American women the ovaries do not seem to be often involved in hysteria, nor are we able to feel them or impress them by the methods described by Charcot. Often, too, I have seen very marked ovaralgia and ovarian tenderness without hysterical symptoms.

For the purposes of prognosis, it is important to decide whether, in such a case as this girl, there are organic changes in the peripheral nerves, spinal cord, or brain. Even when no organic change is present at the start in a hysterical woman, it may be brought about by the continued functional excitement of the nerve-centres. You are familiar with many affections which at first are functional and eventually become organic. I need only recall to

you cases of "tobacco-heart" and of heart-strain in soldiers: these conditions, resulting from abuse and overstrain, lead, finally, to hypertrophy and other organic diseases. Something similar may take place in such cases as the one before you: the motor centres and motor channels being constantly over-excited and over-taxed, permanent changes may be produced in the delicate nerve-tissue; sclerosis may result. The best test that I know of for determining whether a contraction has become fixed—the result of secondary organic change—in a case of hysteria is the effect of etherization. So long as, during anæsthesia, the members relax, there is reason for believing that no serious lesions have occurred. Now, etherization produces here complete muscular relaxation. Similar cases, of much longer duration, have recovered. The mere fact that the case has lasted so long does not prove the existence of organic lesion; and I am inclined to believe no such lesion exists, and that recovery is possible, and may be sudden. The case has had all ordinary therapeutics applied to it, without result so far.

I would like to discuss carefully the proper treatment, but my hour is expired, and I must leave this for a future lecture.

ORIGINAL COMMUNICATIONS.

WEAK SPINES IN YOUNG GIRLS, AND THEIR TREATMENT.

Read before the Philadelphia County Medical Society, December 15, 1880,

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MY intention this evening is to bring before you a subject that may at first sight appear a trivial one, but which more extended observation and careful study have led me to consider worthy of the attention of this Society.

Thousands of young children are at this time bending over their books in the crowded school-room, straining their eyes, narrowing their chests, and bowing the back upon whose erectness and resiliency they should in future depend not only for support, but for health,—even life. A few years hence, these very spines, now strained, weakened, and probably curved, will be

called upon without further preparation to bear the brunt of the great requirements of society, and soon after to be tortured by the physical burden of maternity; or probably the store, the sewing-room, or the factory, aided by some inherited taint, will determine the lesion and give us the cases of phthisis, diseases of the heart, carcinoma, and the various chronic affections that fill our mortality tables.

I call particular attention, in my paper, to the girls, because they are by far the more important class, and the out-door games and occupations of the boys tend to obviate what the sedentary tasks of their sisters but tend to increase.

Once free from the thralldom of school, the boys break loose to unbend their backs and free their lungs; the girls, to saunter home, their arms burdened with books, to aid their mothers in domestic duties.

The infantile diseases of the spinal column, those that involve the structure, have received careful study, and now, thanks to Sayre, the body is at once placed in splints until the rickety diathesis is overcome by growth and a full supply of bony deposit. Even such cases of structural disease as develop later in life are now easily detected at their earliest manifestation, and either held in abeyance by immediate treatment or effectually checked in their course.

But it is my purpose to call attention to another class where spinal weakness, due to the strain of position,—a condition so insidious in its onset and masked in its course,—escapes attention till the frame, fully set by complete bony deposits, cramps the viscera, and, by impeding healthy action, forms a nidus for disease. The development of the skeleton is undoubtedly influenced by the activity of its muscles: symmetrically-developed muscles will produce straight bones. We read much of dystocia, we hear of pelvic distortions, of narrow diameters. Has any one endeavored to mitigate these evils by helping Nature to make normal what the requirements of dress and pursuit have tended from early life to deform? The remedy for those conditions that have suggested the forceps, the cranioclast, or "version by the feet" lies in the early development of the skeleton by proper physical training,—in other words, by educating the female child to be a mother, and if its diathesis be rickety train its pelvis as well as its brain. Far be it from me to

decry anything that will tend towards the most thorough education of the intellect: my object is simply to contend that study can be accomplished without cramped positions, and that weak spines are not essential to educated women. My attention has frequently been called in connection with dispensary and other practice to a series of cases that forms the basis of this paper. For better elucidation, and to avoid repetition, I shall group them under two heads,—the first comprising those young enough to go through the daily routine of school life and thereby suffer at once from its ill effects; the second, those who, after having spent years in developing their intellect at the expense of their muscular and nerve force, suddenly call upon them to bridge them over the most difficult period of their lives. The first group you recognize by their pale faces, bowed backs, and rounded shoulders, frontal and occipital headache, weak eyesight, cardiac palpitations, disordered digestion, and certain nervous combinations, chorea predominating. Stand at any school-room door on an afternoon in the early spring, and you will not fail to see the cases that fill our dispensaries. You read their remedy in their very faces,—a proper division of study and recreation, recreation that means not mere rest from book-work, but muscular exercise, good food, and fresh air.

To-night to the second group I wish to call special attention: a chapter devoted to its consideration might most appropriately bear for its heading the one prominent symptom, "backache." Free from the daily restraint of school life, their hours are devoted to the absorbing necessities of society, and their habits either become extremely active or extremely sedentary, the mania for violent exercise developing from the lassitude that follows nervous excitement; and from one extreme to the other will these girls drag out years of miserable existence whose monotony will be relieved only by the periodical tortures of dysmenorrhœa. That the functions are deranged is simply in accordance with the general physical strain. In all such cases the great muscles of the back are those most called upon, and soon, from excessive tension or want of nutrition, fail in their most important duty. The equilibrium which is maintained by the concerted action of those of either side is lost by

the giving way of the muscles that malposition has tended to weaken, and the stronger group brought into play draw the spinal column where they will. Neuralgic pains, backache, and internal congestions are the result, to say nothing of the occasional permanent lesion in long-standing cases by the absorption of cartilage. Weariness from anæmia, chlorosis, and hysteria in all its forms is the inevitable sequence. Let me picture for you an example. A young girl comes to your office with the following history. Possessed of a naturally strong constitution and vigorous intellect, she has been ambitious, has graduated after years of close application and with the highest honors of her class. Her winters have been spent in the sedentary pursuits of the school-room; even her hours of leisure have been devoted to her books. Of course, the usual result—"break-down"—has followed, and the routine treatment of tonics has been adopted, and, so far as general appearance is concerned, the patient has been benefited by them. But the principal complaint is weariness, a continual feeling of fatigue, following the smallest amount of exercise, brought on equally well by standing and by sitting, by day and by night. This feeling of weariness is more decided in the back, and is so uncomfortable, not to say painful, as to require some constant form of pressure in the lumbar and sacral regions, which, when lying in bed, is brought about by placing a pillow in the hollow. There is also an aching in one of the shoulder-blades, and a feeling of weakness in the muscles at the back of the neck. Upon examination, your patient appears well nourished, but the muscles upon pressure are found to be soft and flabby. It will be noticed when the back is examined that the patient leans more or less to one side, and if allowed to assume a natural and (to her) comfortable position that the difference is often surprising. As a rule, the aching or weariness is found located in the muscles that form the convexity, because those on the concave or the side towards which the spinal column leans seem to draw it in that direction, and thereby stretch the muscular tissue of the opposite side. In several cases that I have seen, this view appeared to be strengthened by the fact that faradic contractility was slightly diminished on the outer convex or weaker side. I have seen cases where

the pressure seemed so great as to cause absolute pain from the curvature alone, and I have no doubt that, without any distinct disease as an initial lesion, a permanent tendinous contraction can take place after a time identical with that which requires surgical interference in other parts of the body. Certain it is that in one case that came under my notice the pressure caused all the symptoms of phthisis in the lung pressed upon, all of which were relieved by straightening the spinal column. It is scarcely necessary to enumerate further the complaints of a patient such as I have described if the condition has been one of long standing: the interference with circulation, the in-door life, the restlessness from nervous irritability, the reflex nervous disturbances, the loss of appetite and want of nutrition, will be shown by a tangled chain of evidence that will tax the power and patience of the most accomplished and amiable of diagnosticians. Various forms of uterine disease, with flexions, versions, and prolapses, ovarian engorgements, enlarged and displaced ovaries, will add to the confusion by their perplexing train of symptoms. Relaxation is the word expressive of the one general cause of such conditions, and in our treatment we must bear in mind the atonic condition of every muscle, nerve, and fibre of the whole body. The admirable teachings of Dr. S. Weir Mitchell have enabled us to value, above all things, absolute rest in all such and allied cases; and to insist that, in the majority of those to which I now allude, it is the primary factor in their treatment, is simply to add testimony which is not required to the great success that has attended its trial.

When examination shows us decided weakness in the muscles of the back, I have of late adopted a plan calculated to give the support which is needful until the nutrition and strength of the muscle have been increased by local treatment. Instead of the plaster dressing, which is so valuable at other times, I would suggest the use of some lighter material, cardboard, for example, which, softened by hot water, easily moulds, and when dry and hard forms a light and admirable splint. It may be applied in this way. A small strip, extending fully the breadth of the back from the lower border of the scapulæ to the most prominent portion of the sacrum, covered with linen, is applied, when soft-

ened, over a piece of cotton flannel or some such material, while the patient is sitting, care having been taken that during the application the spinal column is erect. A few turns of a roller will secure it in place. I usually cut the cardboard heart-shaped, with the base upward and the apex down. When dry, the support will be found complete. The shoulders will rest on a level, the lower borders of the scapulæ firmly fixed upon the upper part of the board, this position being, I think, most important. The cardboard can be attached to the corset, taken on and off with it, and, as the clothing fits perfectly without giving the least hint as to what lies beneath, patients will wear it with comfort and willingly for any length of time. But above all things I believe in the daily use of the faradic current, applied to those muscles or groups that it is proposed to strengthen, and to them alone: thus, if the column leans towards the right side, faradize the muscles of the left. This, I believe, is of far greater value than we have been accustomed to consider it, for single muscles can thus be readily exercised to the exclusion of others, and exercise of this kind brings with it increased nutrition, strength, and development in size. With such a power, when applied with the perseverance it demands, what are we not capable of doing? The aurist will tell you of its use in increasing the muscular tonicity of the smallest and most delicate muscles of the inner ear. In diseases of the uterus so powerful is its local action, when properly applied on muscular fibre, as to make permanent a position in many cases which has needed for years the support of the pessary. I may almost predict for the oculist its value in restoring accommodation instead of the ever-fashionable glasses. It is the daily systematic use of a well-contracting current that is followed by the beneficial result, just as it is the mildest form of continued exercise, and not the spasmodic muscular effort, that makes a man powerful. Recommend your patient before retiring to hang by the hands from a horizontal pole for a few moments, to use cold sponging, friction, and, above all, when possible, massage, to exercise daily in the open air, which the back-support invites, as the want of it before discouraged. When strength is gradually accumulated, encourage that most healthy and invigorating exercise, swimming, which

is never followed by the ill effects so often seen in women from the overstraining of violent walking or horseback-riding.

THE SULPHATE OF HYOSCYAMINE AS A MYDRIATIC.

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UNTIL a comparatively recent date, ophthalmic surgeons were compelled to rely solely upon the sulphate of atropin both in the treatment of certain inflammations of the eye and for paralyzing temporarily the power of accommodation. Other agents have, however, been introduced, which rival the old mydriatic in their ability to set aside the power of adjustment and possess the added advantage of resigning their control more rapidly. My investigations with the sulphate of duboisine (*Amer. Jour. Med. Sci.*, April, 1880) and the hydrobromate of homatropine (*ibid.*, January, 1881) have encouraged a similar investigation into the properties of hyoscyamine and daturine,—specimens of which, manufactured by Merck, have been kindly supplied me by Mr. George I. McKelway.

The present paper is a preliminary statement of the results thus far obtained from hyoscyamine.

In the following group of eight cases a solution of the sulphate of hyoscyamine, gr. ij to f3j, was invariably used,—being first instilled in the clinic-room and a careful record made of its action over the pupil and accommodation.

In a few instances a solution, gr. j to f3j, was furnished, to be used three times daily at home. At the succeeding visit the stronger solution, one or two drops in each eye, was again instilled, and the examination for the glasses made after a time varying from thirty minutes to an hour, or longer. In three cases the glasses were ordered after the single instillation, the power of accommodation being entirely set aside. In Case VI., two drops of the two-grain solution were applied very thoroughly. In twenty minutes she complained of giddiness, so that in crossing the room she walked as though suffering an attack of vertigo. Her glasses were ordered one hour and a quarter after the application,

and she left the clinic-room without difficulty, the giddiness having nearly disappeared. In no instance was there any complaint made of dry throat or skin, nor was there the least conjunctival irritation following its use.

In Case VII. the lad's mother was disturbed in the night by his restlessness and talking in his sleep, which she thought must be due to the drops. He was using the one-grain solution at home.

In Case VIII. the result obtained under hyoscyamine was confirmed by the subsequent use of a four-grain solution of sulphate of atropine three times daily for two days.

Case I.—At 5 o'clock P.M. a minute quantity of a solution of the sulphate of hyoscyamine (gr. ij-f3j) was applied to the conjunctiva of the lower eyelid without causing any irritation. In ten minutes there was some disturbance of near vision, and the pupil larger than in the other eye and slightly ovoid. In twenty minutes the pupil was dilated *ad maximum*, and J. 1 could not be seen. In thirty minutes J. 1 could be read only at the focus of a convex glass ($+1\frac{1}{2}$ J. 1, 11" to 13"; slight H.). At 12 o'clock the following day, nineteen hours after the application, which had not been repeated, the pupil was still widely dilated and immovable, and the paralysis of accommodation complete. At 5 P.M., twenty-four hours after the application, there was still complete mydriasis and no return of accommodation. At 9 o'clock A.M. the following day, forty hours from application, with $+1\frac{1}{2}$ J. 1, p. p. 7 $\frac{1}{2}$ ". At 3 P.M., $+1\frac{1}{2}$ J. 1, p. p. 5 $\frac{1}{2}$ ". On the morning of the fourth day, 9.30 A.M., the near point for each eye was the same (7")—the normal range of accommodation.

Case II.—One drop of a two-grain solution of hyoscyamine was instilled into each eye of a girl 15 years of age. In ten minutes the pupil of O.S. was dilated *ad maximum* and fixed, that of O.D. retaining a slight resiliency. In twenty minutes both pupils were dilated *ad maximum* and fixed. In twenty-five minutes, with $+1\frac{1}{2}$ J. 1, 11 $\frac{1}{2}$ "-12" for O.D., 10 $\frac{1}{2}$ "-12" for O.S.

On careful testing with trial-glasses, one hour after the instillation, she very positively selected O.D. $+10\frac{1}{2}$ s \subset $+1\frac{1}{2}$ c, axis 30°; O.S. $+1\frac{1}{2}$ s \subset $+1\frac{1}{2}$ c, axis 90°; and all accommodation was abolished. Seventy-two hours after the use of the drops, with the correcting-glass J. 2 could be read up to 6 $\frac{1}{2}$ " with O.D., 5" with O.S. The pupils were dilated small-medium, and reacted quite promptly to changes of light and shade. Twenty-four hours later, the pupils were normal in size and action, and, with her correcting-glass, the accommodation had fully returned.

Case III.—In this case a small drop of two-grain solution was instilled in each eye of a patient of 43 years, suffering from retinal irritation, with spasm of accommodation simulating a considerable myopia. In an hour the mydriasis was complete and the accommodation was totally paralyzed, revealing hypermetropic astigmatism of $\frac{1}{2}$ in the highest meridian. The choice between several compound glasses could not, however, be made with certainty, the irritable condition of the eyes and the use of artificial light being the probable causes of the hesitation. A solution (gr. j-f $\frac{3}{4}$ j) was given to be used twice daily at home, and after sixty hours the paralysis was still complete. The two-grain solution was, however, again employed, repeated in an hour (this time two drops in each eye thoroughly applied), and the final choice of the glass was made without hesitation. Although the mydriatic was here freely used,—more freely at the last than duboisia could have been employed without liability to constitutional disturbance,—no unpleasant symptom was experienced beyond that incidental to the paralysis of the accommodation and the dilatation of the pupil.

Case IV.—A medical student, with marked retinal irritation and apparent myopia from accommodative spasm. Half an hour after the instillation of one drop of the two-grain solution the mydriasis was complete in the left eye, and $+\frac{1}{2}$ c, axis 75°, brought the vision a little above normal. In the right eye an increment of accommodation remained, and one meridian seemed still myopic. After sixteen hours the instillation was repeated, and again twenty-four hours later. The myopic meridian of the right eye had now disappeared, giving place to simple hypermetropic astigmatism, no change having taken place in the left. With a convex glass added to the correction, J. 1 was read exactly at its focus, being blurred at every other point; *i.e.*, the paralysis was absolute. Thirty hours after the last use of the drops there was very slight return of the action of the iris, but the accommodation had returned sufficiently to allow medium print to be read, and with $+\frac{1}{2}$ s J. 1 could be read up to 7". Twenty-four hours later the pupils were still widely dilated and sluggish, but, with the correcting-glass, the accommodation had almost completely returned. Eighty hours after the last instillation the accommodation had been fully recovered, but the pupil was still dilated medium, though reacting promptly to changes of light and shade.

Case V.—Another medical student, with myopic eyes stirred up to spasm by the effort to wear too strong a glass. Fifteen minutes after the instillation of two drops of the two-grain solution in each eye the pupils were fully dilated and fixed, but the accommodation was not completely paralyzed, and had not become entirely quiet an hour after the

instillation. On testing with the trial-glasses, one hour and a half after the instillation, the spasm was gone, the paralysis complete, and the compound correcting-glass was selected without hesitation. Twenty hours later the pupil was still fixed, but the accommodation had returned in part, and the spasm had recurred. Forty-eight hours after the use of the hyoscyamine the pupils were small-medium, and, with the astigmatism corrected, the accommodation but little below normal. When next seen, forty-eight hours later, the accommodation had completely returned, and the pupils were normal.

Case VI.—Mrs. H., æt. 49, suffering from asthenopia. A two-grain solution of the hyoscyamine salt was instilled, two drops in each eye, at 1.40 P.M. At 1.45 the right pupil was oval; left, no change. 1.47, both dilated medium and reacted sluggishly. 1.54, pupils dilated widely and were immovable, and vision had sunk from $\frac{20}{XXX}$ to $\frac{20}{C}$. At 2.20 she selected $+\frac{1}{2}$ s $\subset +\frac{1}{80}$ c, axis 90°, V = $\frac{20}{XX}$, for O. D.; $+\frac{1}{80}$ s $\subset +\frac{1}{80}$ c, axis 90°, V = $\frac{20}{XX}$, for O. S. Half an hour later, on careful measurement, the same glasses were again selected, and with them, and $+\frac{1}{2}$ added, she could read only at its focus, the paralysis of accommodation being complete. In twenty minutes after the application Mrs. H. complained of vertigo and walked across the floor with difficulty. In one hour and a half this had quite disappeared, so that she was able to return home without difficulty.

Case VII.—A boy of 10 years, with a family history of eye-trouble, suffering from the tax of his school-work. A convex glass had been ordered, in conformity with the ophthalmoscopic reading, but had failed to make him comfortable. Two drops of the two-grain solution were instilled in each eye, and in fifteen minutes the pupils were dilated *ad maximum* and fixed. In forty minutes all accommodation was apparently gone, but the full hypermetropia was not revealed except to the ophthalmoscope, and the astigmatism, though recognizable, could not be accurately measured. A solution (gr. j ad f $\frac{3}{4}$ j) was given, to be used three times daily for two days, and the two-grain solution was repeated on his return. The determination was now made with little difficulty, but a lingering doubt, caused probably by the irritability of the eyes, led to the continued use of the drops (one-grain solution). After twenty-four hours the determination was made without difficulty, and the accommodation was found absolutely paralyzed. When next seen, seventy-two hours after the last use of the drops, the pupils were still dilated to medium, but were prompt up to this point in their reaction, and the accommodation had in great measure returned. Twenty-four hours afterwards the pupils were about the same, and the

near point still a little outside of that first recorded.

Case VIII.—A student, 20 years of age, with hard-worked eyes, suffering extremely from straining to overcome a high hypermetropic astigmatism. The two-grain solution was instilled, and in twelve minutes the pupils were widely dilated; in twenty-five minutes they were dilated *ad maximum* and fixed. At the test, made within an hour after the instillation, the entire astigmatism was revealed, but $\frac{1}{8}$ of hypermetropia, shown by the ophthalmoscope, remained latent. A solution (gr. j ad f3j) was given, to be used twice, at home, during the twenty-four hours, and was instilled for the third time forty-five minutes before the test. A satisfactory determination of the correcting-glass was now made, but to complete the case a solution of atropia (gr. iv ad f3j) was substituted, to be

employed three times daily. After forty-eight hours' use of the latter mydriatic, identically the same glass was selected for the right eye (the eye with which he was accustomed to work, the other being more defective), while for the left a nearly equivalent glass, with a slight change in the relation of spherical and cylinder, was preferred. The vision was slightly better in both eyes, as under the mydriatics they had lost much of their irritability. In this case at the first application only was the two-grain solution employed, and the one-grain solution only three times in the twenty-four hours.

The left eye, selected after hyosc. gr. ij sol., one hour, $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 85° .

The left eye, selected after hyosc. gr. j sol., twenty-four hours, $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 90° .

The left eye, selected after atrop. gr. iv sol., forty-eight hours, $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 85° .

No.	Age.	Length of Use.	Return of Accommodation.	Formula of Correction.	Remarks.
1	...	{ 1 hour (single application).....	{ 90 hours.....	...O. D. $+1\frac{1}{8}s$	{ Pupil still slightly dilated at 90 hours.
2	15	{ 1 hour (single application).....	{ 96 ".....	{ O. D. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 30° { O. S. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 90°	{ Pupils normal at 96 hours.
3	43	...68 hours.....	...100 ".....	{ O. D. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 30° { O. S. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 120°	{ Pupils dilated medium, but prompt.
4	21	...40 ".....	...77 ".....	{ O. D. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 165° { O. S. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 75°	{ Pupils dilated medium, but prompt.
5	20	{ $1\frac{1}{2}$ hours (single application).....	{ Nearly complete; 48 hours.....	{ O. D. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 120° { O. S. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 75°	{ Pupils dilated medium, but prompt.
6	49	{ $1\frac{1}{4}$ hours (single application).....	{ 100 hours.....	{ O. D. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 90° { O. S. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 90°	{ Giddy. Pupils dilated medium, but prompt.
7	10	...72 hours.....	{ Not quite complete; 96 hours.....	{ O. D. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 75° { O. S. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 105°	{ Pupils dilated medium, but prompt.
8	20	...25 ".....	.....	{ O. D. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 105° { O. S. $+1\frac{1}{8}s \subset +1\frac{1}{8}c$, axis 85°	{ Confirmed after atropia, 48 hours.

It will be seen from the foregoing that the hyoscyamine is a powerful mydriatic; that in the rapidity of its action over the iris and ciliary muscle, and in the duration of its control, it is more like duboisine than like atropine. The giddiness, which, however, occurred in but one instance, was also more like the constitutional effect of duboisine; but it was not attended by the sense of weakness in the lower extremities produced by that drug when used incautiously. That there is little danger of annoyance from the constitutional impression, when used in solution no stronger than two grains to f3j, is indicated by the fact that, though used profusely in several of these cases, there was no disturbance whatever except in the case of Mrs. H., above noted, where the giddiness was possibly due to the rapid paralysis of the accommodation and consequent blurring of vision. Regarding the effectiveness of hyoscyamine in paralyzing the accommodation, further observation

will be necessary; but Case VIII. is important in this connection, since the subsequent prolonged use of atropiæ sulphas only served to confirm the result obtained under the hyoscyamine.

In closing this preliminary statement, I desire to express my obligations to Dr. B. Alexander Randall and Dr. James Wallace for their efficient aid in making and recording these observations.

1430 WALNUT STREET.

HOMATROPINE HYDROBROMATE: IS IT A POWERFUL MYDRIATIC?

BY WILLIAM F. LITTLE, A.M., M.D.,

Chief of the Eye Clinic, Jefferson Medical College Hospital.

MY attention was first called to homatropine hydrobromate by a short notice in the *American Journal of the Medical Sciences* for July, 1880. At the annual meeting of the American Ophthalmological Society, held in July, I spoke to several

members individually about it, and no one had any knowledge of it. I was unable to obtain possession of the drug until some two months ago.

Dr. Schell, in Nos. 336 and 337 of the *Philadelphia Medical Times*, Dr. Keyser, in No. 338 of the same journal, and Dr. Risley, in the January, 1881, number of the *American Journal of the Medical Sciences*, have brought the drug before the profession in this country, and many have had opportunity to test its value. Can we claim for it all that is desired as a mydriatic for the purpose of full refraction? It has been used sufficiently in my dispensary service at the Jefferson Medical College Hospital and in my private practice to enable me to express an opinion as to its capabilities and position among the mydriatics available for refractive purposes. My private students—several physicians and professional men—were my first cases; several had been refracted under atropia or duboisia previously, and one, under my own observation, had, after a sufficiently prolonged interval, a solution of atropia, gr. iv, duboisia, gr. iv, and homatropine, gr. viii.

Dr. Schell advocates a solution xvi gr. Dr. Risley says a ii gr., iv gr., or vi gr. is sufficient. I selected a solution viii gr. to the ounce without bringing any data to bear; more than fifty eyes have been examined by me. I merely wish to explain briefly what I have found it worth. In procuring refraction, a mydriatic is required that will paralyze the ciliary muscle, or if it is not accomplished we should be cognizant of it. I am an advocate of refraction as positive as it can be made, and, having experienced the advantages of a full correction and the permanence of it where spasm of accommodation or choroido-retinal irritation is overcome, we should seek this in the treatment of our cases.

The use of homatropine in my dispensary service has been given up for the following reasons. Its short duration prevents a second trial, and, it being required to be used a second time, a variableness is found in the results of myself and associates that leads to uncertainty, remembering that a patient with your glass on has you by the nose, so to speak, and can lead you into pleasant or unpleasant relations with himself and others. As much certainty can be attained by the ophthalmoscope or the ameliometer of Prof. Thomson—no spasm of accommodation existing, methods being

available to recognize this point—as is obtained by the use of homatropine. The observer must have control of his own accommodation to do this, however. By this statement I mean that I feel as certain of my work with the ophthalmoscope as I do with homatropine; and how closely an ophthalmoscopic examination reveals defects is fully appreciated by all observers, few being able to command control of their own accommodation, as is required to make the result effective. Preference, then, should be given to a drug that gives more time, more certainty, and full corroboration by the ophthalmoscope in dispensary service.

The same holds in one's consulting-room, and when the ophthalmoscope, with other methods, cannot give a diagnosis, there should be no uncertainty in the drug used.

Patients complain very little as to the length of duration of the annoyance of mydriatics between duboisia and homatropine where symptoms occur that they are only too glad to be relieved from, even under the delay that occurs in strong solution of atropia.

Advocates of homatropine, when employing atropia, not unfrequently employ the drug (atropia) for several days prior to their making an examination, presuming that all cases have spasm of accommodation or choroido-retinal irritation; yet they use a drug which is more evanescent and has some uncertainties after one instillation in the same class of cases.

Dr. Risley says, "In other cases, on subsequent examination under atropia or duboisia, slight changes were made in the glasses at first chosen under homatropine, but not greater than are often made after the continued use of atropia or duboisia. It also happened that when the first examination was for any reason not satisfactory, and where the homatropine was continued, a second examination revealed a slightly higher degree of hypermetropia or astigmatism. More frequently, however, only a greater certainty in placing the direction of the cylinder axis was observed, or an improved sharpness of sight with the same glass at first selected, due, no doubt, to the subsidence of the choroido-retinal irritation." It is "the slight change in the glass," or "slightly higher degree of hypermetropia or astigmatism," or "greater certainty in placing the direction of the cylinder axis was observed," or "an improved sharpness

of sight,"—it is all these that are so apt to be found under homatropine that enables its uncertainty to be almost assured, and these slight uncertainties make the result less valuable; and when this can be attained by the ophthalmoscope, the observer controlling his own accommodation, how can homatropine compare with either atropia or duboisia where prolonged use is required, where spasm of accommodation occurs?

Homatropine hydrobromate, so far, seems to stand in the position of hydrobromic ether. Prof. Thomson, of Philadelphia, and Prof. Noyes, of New York City, have given expression to me very much in the same vein as to the capabilities of the drug.

I find it of service in elderly persons with hypermetropia, whose accommodation has failed, using it where atropia might produce a glaucomatous condition, and I have feared with them duboisia might have the same effect as atropia occasionally has, but as yet no cases with either duboisia or homatropine have been quoted. For mere mydriasis to examine the fundus of the eye and other internal tissues it is most serviceable. Its therapeutic effect has not been attempted.

A further acquaintance with the drug and methods of using it may make it more available, but, so far, atropia and duboisia are the more efficient in correcting optical defects.

219 SOUTH SEVENTEENTH STREET.

COMPOUND COMMINUTED COMPLICATED FRACTURE OF JAW.

BY HENRY M. WETHERILL, M.D.

JOHN G., æt. 32, single, was admitted to the Surgical Ward of the Pennsylvania Hospital, under care of Dr. William Hunt, June 21, 1880.

This man had his face crushed in a machine-shop, between the floor and a roller. Upon admission, the right side of his face was drawn very much inward, the features twisted over towards the opposite side, and the mouth puckered up as though the patient was whistling. On the right side of his face was a lacerated wound two and one-half inches in length, commencing at a point half an inch below and immediately under the angle of the mouth, and extending downward and backward, crossing the jaw. The lower jaw was very obliquely fractured and very badly comminuted at a point corresponding to this wound. The articulating end of the right

side was luxated forward from its glenoid cavity, and the lower end of the upper fragment was carried over to the opposite side of the mouth, this sharp point piercing the left cheek.

The hemorrhage was very free, the floor of the mouth and the mental artery having been lacerated. The neighboring soft parts were much contused.

The luxation was easily reduced, but it was found to be impossible to approximate the main fragments until all of the comminuted bone was removed, with three of the teeth, the latter carrying with them portions of the alveolar border of the jaw. Four spouting vessels were then ligated, and the oozing controlled by very warm water. The long, sharp, oblique upper fragment was next forced down into position, when it was seen that the loss of bone was very considerable, a triangular cavity or hiatus being thus formed, the base corresponding to the base of the jaw, the apex to the alveolar border. So strong was the action of the temporal, pterygoid, masseter, and buccinator muscles as to require considerable effort to hold the upper fragment in position.

It having been found impossible to retain the fragments in apposition by any of the ordinary appliances, the patient was etherized, and the writer, by the kind permission of Dr. Hunt, operated. The existing wound was enlarged by carrying a knife up through the angle of the mouth, and a broad flap was dissected back over the extremity of either fragment, thus fully exposing the sound bone.

The periosteum was found to have been very much torn. Several bleeding vessels were ligated, and either fragment near its extremity was drilled through in two places and the fragments brought into approximate apposition by the passage of very stout silver wires through the drill-holes, the ends of each pair being twisted firmly up, left long, and carried outside the external wound. The soft parts were brought together by pins and twisted sutures. Dressing,—carbolyzed lint, a pasteboard jaw-cap, and Barton's bandage. This arrangement held the very irregular fragments without motion, and the dental line was almost perfect. Ordered liquid diet.

Upon the 30th the sutures in the soft parts were all removed, the pins having been withdrawn five days previous. The ligatures were all away, and the condition of the patient good. The dental line was well preserved, and the fragments were firm.

At no time was there any marked rise of temperature, and the man fed well on

fluids. From time to time various shells of necrosed bone came away, but progress towards recovery was steady.

Under date of August 21 is noted "that the last bone suture came away, and careful manipulation reveals that the union is perfect, the contour of the jaw good, and the line of the teeth well preserved. He masticates solid food as well as before the injury, and the only resulting deformity is the slight one of a cicatrix running downward from the angle of the mouth to the base of the jaw."

SOME TABULAR RESULTS OF THE MOVEMENT-CURE.

Presented to the Philadelphia County Medical Society at the Meeting of November 24, 1880,

BY BENJAMIN LEE, A.M., M.D.

MANY members of this Society will remember having seen in Machinery Hall, at the Centennial Exhibition, a very interesting exhibit of apparatus intended for administering the Swedish movements. The table which follows is an abstract from the report to the National Board of Health, at Stockholm, of the Medico-Mechanical Institute of Gothenburg, Sweden, in which similar apparatus is in use. It covers a period of five years, from 1867 to 1872:

Diseases.	Number of cases.	Cured.	Benefited.	Not benefited.
Diseases of the heart, functional.....	10	9	...	1
" " " organic.....	49	...	42	7
Rush of blood to the head.....	28	10	16	2
Recurring hemorrhage from nose.....	2	2	...	...
Defective capillary circulation.....	7	7	...	...
Paralysis of all forms.....	25	7	15	3
Tubes dorsalis.....	3	...	2	1
Muscular atrophy (partial).....	12	2	8	2
Chorea.....	3	3	...	...
Writer's cramp.....	1	1	...	...
Neuralgia.....	12	6	5	1
Nervous exhaustion.....	64	10	41	13
Constipation.....	43	20	16	7
Dyspepsia.....	36	12	22	2
Pulmonary catarrh.....	13	4	8	1
" consumption.....	14	...	9	5
Emphysema.....	11	...	11	...
Scrofula.....	3	2	1	...
Debility with anæmia.....	67	9	52	6
Chlorosis.....	128	44	77	7
Rheumatism.....	48	14	31	3
Disordered menstruation.....	8	2	4	2
Uterine displacements.....	14	3	9	2
Spermatorrhœa.....	13	8	3	2
Spinal curvatures.....	62	20	33	9
Contracted joints.....	11	2	8	1
Chicken-breast.....	30	7	23	...
Total.....	717	204	436	77

One of the most important and successful institutions for carrying on this mode of treatment outside of Sweden is that of which Professor Axel Sigfrid Ulrich, M.D., is director, in the city of Bremen. Professor Ulrich is a man of acknowledged ability, as witnessed by the honors which he has received, being a Knight of the Swedish Order of Wasa, Member of the Medical Society of Stockholm, and corresponding member of the Royal Society of Medicine and the Natural Sciences of Brussels, of the Medico-Chirurgical Academy of Barcelona, of the medical societies of Paris, Antwerp, Athens, etc.

I append a summary of the twenty-third annual report of his institution for the year ending July 1, 1879:

Diseases.	Received.	Cured.	Greatly improved.	Improved.	Unimproved.	Irregular in attendance.	Still under treatment.
Anomalies of innervation, —disturbances of nervous activity (chorea, etc.).....	2	...	...	2	...	...	...
Neuralgia.....	3	...	...	1	1	1	...
Nervous debility.....	5	1	1	1	...	1	1
Disturbances of the circulation, —plethora, rush of blood to the head, menstrual disorders.....	3	1	2	...	...	...	...
Constitutional affections, —scrofulous diathesis....	7	2	3	1	1	...	...
Local thoracic affections, —feeble respiration.....	2	1	1	...	...	...	...
Abdominal affections, —constipation, cardialgia, dyspepsia.....	10	6	3	1	...	...	...
Spinal curvatures.....	59	23	17	14	...	...	5
Rheumatism.....	8	7	1	...	...	...	...
Paralysis.....	5	...	5	...	...	...	...
Joint-diseases.....	2	...	2	...	...	...	...
General debility.....	6	5	1	...	...	...	...
Total.....	112	46	36	20	2	2	6

During the same period the following cases were successfully treated by massage alone: sprained ankle, 6; sprained knee, 2; sprained wrist, 4; sprained fingers, 3; tendo-vaginitis of foot, 2; chronic synovitis, 2. The average number of sittings in the cases of sprain was between five and six. This, I am aware, will scarcely seem credible to those who are accustomed to put a sprained ankle or wrist into splints, starch, or plaster, and see it drag along for weary months before it again becomes a useful member. With the immediate, persistent, and frequent use of this means, however, few sprains will disable the suf-

ferer for more than three or four days, and many will be entirely relieved at a single sitting if it follows the accident within an hour or two.

NOTE ON THE HYGIENIC INFLUENCE WHICH MAY BE EXERTED BY HOUSE-PLANTS UPON INDIVIDUALS WHO ARE PREDISPOSED TO PHTHISIS PULMONALIS.

BY ELY McCLELLAN, M.D., U.S.A.

FOR the past three years there has been almost constantly under my observation a case which seems to be thoroughly corroborative of the views advanced by Dr. I. M. Anders in his paper "On the Hygienic and Therapeutic Relations of House-Plants."*

E. M. is a gentleman 30 years old, who belongs to a family in which there is a marked history of phthisis pulmonalis. His physical appearance would indicate that he might be subject to the disease, but he has, as yet, escaped its development.

The history of this case involves the families of both the father and mother. The father, although born of tubercular parents, escaped the disease, but the mother died at comparatively an early age, leaving a family of five children, four of whom have died of consumption. Of these children three died between twenty and twenty-five years of age; one died in his thirty-ninth year, after a long illness, the last two years of which were under my observation.

E. M. is the youngest of the family. His life, with the exception of the last eighteen months, has been devoted exclusively to sedentary pursuits. At twenty-three he married, and, as he was then engaged in an occupation which required his residence at an isolated locality, for both amusement and occupation his wife commenced the cultivation of house-plants. She soon became an enthusiast, and a profusion of plants, especially those of the foliage varieties, accumulated in her house. As they resided in an extremely changeable climate, where during the cold months constant watchfulness is necessary for the preservation of plants, her bedroom and

the adjoining sitting-room were arranged for that purpose.

Before his marriage E. M. complained of, as he expressed it, "a weakness of the chest, and a constant liability to take cold." Since his marriage, with the exception of an occasional dyspeptic ailment, he has seemed a healthy man; and it is but reasonable to attribute his escape from the disease which has destroyed so many of his family to the fact that he lives, and has lived for the past seven years, in apartments well stocked with thrifty plants.

December, 1880.

TRANSLATIONS.

DISEASES OF THE KIDNEYS DEPENDENT UPON SYPHILIS.—Dr. E. Wagner (*Deutsches Archiv für Klinische Medizin*, 28ten Bd., p. 94) says that although kidney disease as a result of syphilis is unusual, yet it is not as rare as has been supposed. In 9000 autopsies Wagner found 63 cases of kidney trouble. Of these 8 were acute Bright's disease, 4 chronic, 7 granulated kidney, 6 atrophy of one kidney, 35 amyloid degeneration, and 3 syphiloma. Speiss, in 220 autopsies of syphilitic cases, found pathological changes in 147. Only 7 had gummatous interstitial nephritis. Of 10 cases of congenital syphilis with diseased kidneys there were 3 each of parenchymatous nephritis, amyloid nephritis, and infarction, with 1 of simple interstitial nephritis. Bamberger found 49 cases of syphilitic disease in 2340 cases of acute and chronic Bright's disease. A. Beer describes very fully the various anatomical conditions in the kidneys of syphilitic persons. 1. Small circumscribed nodular formations (gummatous tumors) in otherwise normal or differently-diseased kidneys. 2. Simple interstitial hyperplasia, mostly irregular with the formation of cicatrices; rarely scars in otherwise normal tissue. 3. Diffuse cellular hyperplasia of the interstitial tissues, mostly with lardaceous degeneration of the vessels and manifold atrophies of the new formation, as well as with peculiar parenchymatous changes. These were particularly small fatty deposits; rarely this form without lardaceous degeneration. 4. Purely parenchymatous affections. Without other aids to diagnosis, only the first and third of these forms can, according to Beer, be regarded as characteristically syphilitic.

* Philadelphia Medical Times, May 8, 1880.

In Wagner's study of these diseases he divides his cases into several categories.

1. Under the head of acute Bright's disease he gives the histories of three cases where this affection was either observed in patients under the full influence of the early stages of syphilis, or where the symptoms disappeared under the use of antisyphilitic remedies, and follows these with five more cases where post-mortem examination of patients who had showed symptoms of syphilis during life revealed parenchymatous nephritis with hemorrhage, etc. 2. Under the head of subacute or chronic Bright's disease Wagner gives four cases similar to those in the first division, except that the autopsy showed in each case the second stage of Bright's disease. 3. Under the head of granular kidney seven cases are included, in four of which a microscopic examination was made. General characteristic appearances were not noted; in particular there was no constant arterial affection. The coincidence of the syphilitic symptoms and the kidney disease appears to have been made out in each case.

Under the head of unilateral atrophy of the kidney six cases of constitutional syphilis are given where marked contraction of one kidney was found with compensatory hypertrophy of the other, which was either normal or showed amyloid degeneration. While other causes might have been adduced for the atrophy in these cases, syphilis was the most likely. Weigert observed the same condition in two instances, and found arteritis obliterans as first described by Heubner in syphilis. Macroscopically the kidneys were quite smooth; microscopically the changes were closely similar,—extreme disturbance of the cortical canaliculi, sometimes with entire, sometimes with contracted glomeruli in a stroma diffusely infiltrated with small cells.

Wagner observed thirty-five cases of amyloid degeneration of the kidney, and gives brief notes of the most interesting. Tuberculosis and also amyloid degeneration of liver and spleen were present in many of these cases. Some cases were cured. Finally, Wagner gives several cases of syphiloma, one of which had apparently been cured by treatment. He adds to this a number of references. The article is a very valuable one, and is carefully worked up.

A CASE OF INTERMITTENT ARTICULAR SWELLING.—Dr. Kolbe's case (*Deutsche Med. Wochens.*, January 22, 1881) was that

of an unmarried lady of 32, of a neuropathic family, who had never suffered from any serious disease, but showed signs of general impoverishment of the blood. Seven years previously she had stumbled in ascending a staircase, and had immediately experienced a shooting pain in the left knee. Nevertheless, the patient danced frequently the ensuing evening. On the next day a well-marked swelling of the knee-joint was observed, which necessitated the application of a plaster-of-Paris bandage. When this was removed, the swelling was found to have disappeared; but it reappeared within two or three days. This recurrence was observed, in spite of repeated bandaging, for more than six months, after which the knee returned to its normal condition, except that it was weak.

Two years later the patient again injured this knee, and although the swelling, etc., were reduced by treatment, regular remissions at intervals of nine days began to be observed. After the use of an acid ferruginous mineral water the intermissions grew longer and the relapses more and more irregular. But again, a year or so later, after a fresh fall, the knee trouble began once more, and this time (summer of 1878) the patient called in Dr. Kolbe. She complained of weakness in the left leg, with occasional pain in the left knee-joint. Her gait was normal, but she became easily tired. The alar ligaments were slightly swollen and doughy. After using bog-baths for some weeks, the patient appeared nearly well.

The following summer, however, the disease again recurred, following some slight over-exertion. Hydropathic and other treatment improved the condition of the joint, but the disease a few months later took once more a distinctly periodical course. Every eleventh day the patient, without having experienced any prodromal signs, observed on waking that her left knee was decidedly swollen. The swelling increased without pain until the evening of the twelfth day, and gradually disappeared on the thirteenth and fourteenth days. The only disturbance was that of difficulty of locomotion. The disease kept on in this intermittent course for nearly a year, the patient becoming meanwhile greatly depressed and anæmic from moral causes. Examination showed each remission to be followed by serous effusion.

Fifteen grains of salicylic acid, given every two hours during two days before the expected attack, prevented its appearance. As this disturbed the stomach, Fowler's solution, with a fixed silicate bandage to the knee, was prescribed, and the patient confined to a wheel-chair. By this means a perfect cure was attained.

SECONDARY SYPHILITIC LARYNGITIS.—Dr. Gougenheim, in a lecture recently reviewed in *La France Médicale*, says that this affection is not of infrequent occurrence, being found in two-fifths of all syphilitic cases. It has never been carefully studied until lately with the aid of the laryngoscope. The parts of the larynx affected are swollen: when the syphilis is advanced, the tumefaction may become general. It is thus a grave form of the disease, intermediate between secondary and tertiary syphilitic laryngitis. Ulcerations are frequent, usually seated upon the epiglottis, particularly on its free border. They are somewhat large and of an irregular shape. Occasionally they are deeply excavated. The swollen parts may remain a long time in that condition; sometimes even the tissues become indurated and degenerate in a definitive fashion. The duration of the affection is from two weeks to two months; sometimes, however, relapses are frequent. The diagnosis, which presents no difficulty, is based on the occurrence of the ulcerations and on the co-existence of other signs of syphilis. The prognosis is favorable; the treatment is general and local. The latter consists in the application of ten to twenty per cent. solutions of nitrate of silver.

CARBOLIC ACID APPLICATIONS IN ERYSIPELAS.—Subcutaneous injections have already been employed, and not without success, about the borders of the parts involved in cases of erysipelas. In private practice this method cannot be employed, at least in erysipelas of the face. The following formula, which has been employed for some years by Dr. Rothe, of Altenburg, seems, if not to arrest the course of erysipelas, at least to abridge considerably its duration and to lessen its gravity. Dr. Rothe bathes the affected surfaces with the following liniment:

R Acidi carbolici, gr. xv;
Alcoholis, ℥xv;
Ess. terebinth., ʒss;
Tinct. iodini, ℥xv;
Glycerinæ, ʒiv.—M.

These applications are quite neutral; they do not even cause heat of skin. From the next day it is pale. This plan does not, any more than previous methods of local treatment, prevent the extension of the disease elsewhere, but in bathing the affected surfaces a rapid retrocession is obtained, so that erysipelas of the face lasts only three or four days. The places bathed every two hours are covered with a thin layer of cotton kept in place by a bandage. The various internal symptoms are to be combated with the usual remedies.

FRACTURE OF THE PALATINE ARCH.—Dr. Apicella (*Le Réveil Méd.*, 1881, p. 290; from an Italian source) gives the case of a man who was kicked by a horse on the right jaw. Epistaxis followed. The soft parts were bruised without solution of continuity in the skin; there was abnormal mobility of the right half of the palatine arch and the superior maxilla, which last was entirely displaced. Intense pain was caused by any attempt at palpation; the teeth on this side were loose. The diagnosis of longitudinal fracture of the hard palate was made. The treatment consisted at first of bladders of ice externally, and soft food. Three days later, the tenderness of the parts was much decreased, and the fragments could be replaced. This having been done, wire ligatures were run through between the teeth of the fractured and those of the neighboring sound parts of the maxilla. A bit of cork was then shaped to fit the two dental arches, and was applied between the two maxillæ, being retained firmly in place by a bandage. Cold applications were continued, with liquid food, and the patient was forbidden to talk or to masticate. On account of his indocility it was necessary to re-apply the wires at this stage; but at the end of twenty days union was complete.

REFLEX URINARY PARALYSIS.—At a recent meeting of the Société de Chirurgie (*Le Progrès Méd.*, 1881, p. 29) M. Marc Sée read a report respecting a man who, after a blennorrhagia of six or seven weeks' duration, was suddenly seized with difficulty of urination. After exploration and catheterism, the physician, Dr. Dieu, diagnosed a rapid stricture. Catheterism became more and more difficult, and internal urethrotomy was decided upon. The impossibility of introducing a director caused the operation to be postponed.

Meanwhile, the lower limbs lost power rapidly. Catheterism having been once more attempted, M. Dieu at last perceived certain rugosities which led him to suspect the presence of a urethral calculus situated behind a stricture and acting as the cause of a reflex paralysis. After various ineffectual attempts to push the calculus back into the bladder, external urethrotomy was practised upon a conductor, resulting in the removal of a calculus one centimetre long by three millimetres in diameter. The paraplegia—which, it is proper to say, had already begun to improve—rapidly disappeared after the operation.

ACTION OF SALICYLATED CAMPHOR.—Dr. Lajoux, in searching for a surgical dressing which would fulfil the double object of acting on the albuminoid ferments and on the inferior organisms, found that salicylic acid would fulfil the first of these indications and camphor the second. He therefore conceived the idea of combining the two, and has produced a compound to which he has given the name of salicylated camphor. Dr. Henrot (*La Presse Méd.*, 1881, p. 25; from *Union Méd. et Sci. du Nord-Est*) has studied the therapeutic properties of this compound with decidedly satisfactory results. In a case of ulcerative lupus occurring in a syphilitic patient, where the sores had resisted internal treatment and had not been affected by the local remedies used, a pomade of salicylated camphor caused the ulcers to put on an improved appearance within one or two days, the patient being entirely cured in a little more than a month. In the case of a phagedænic ulcer of the fourchette in a young woman, lasting six months and destroying a large quantity of tissue, a cure was effected by this remedy in a fortnight. Dr. Henrot suggests its employment in superficial epitheliomata and in indolent leg-ulcers.

NITRITE OF AMYL IN CYSTITIS.—Weisser (*Med.-Chir. Centralbl.*; *Le Réveil Méd.*, 1880, p. 259) calls attention to the antiseptic properties of nitrite of amyl. He presented before a German medical society a bottle containing urine which had been preserved without alteration for three years, the cork only having been moistened with nitrite of amyl. Weisser has also proved the effective action of nitrite of amyl in cystitis. A man of sixty had suffered for five years with chronic catarrh of the bladder. Injections of twenty centi-

litres (6½ oz.) of a solution containing three drops of nitrite of amyl were made twice daily with the aid of a Nélaton's catheter. Antispasmodics were administered meanwhile to relieve the tenesmus. At the end of six weeks the patient was entirely cured.

SCROFULA AND TUBERCULOSIS.—In the course of a discussion had on this subject recently in the Société Médicale des Hôpitaux (*Bull. Gén. de Thérap.*, 1881, p. 34) M. Rendu concluded his remarks with the following statement:

1. The so-called tuberculosis nodule is not a specific element; it is found in a number of accidental neoplasmata.

2. Scrofula is a true diathesis, characterized by a series of variable manifestations upon which it impresses a special physiognomy.

3. Tuberculosis, on the contrary, is not a diathesis; it presents itself with the aspect of the parasitic diseases, always ready to germinate when the organism becomes debilitated.

4. The relations of scrofula and tuberculosis are nothing more than those of seed and soil: scrofula is the soil, tuberculosis the parasitic germ.

HYPODERMIC INJECTION OF METALLIC MERCURY IN SYPHILIS.—Dr. Luton uses this method with success. He shakes one to two globules of mercury with sixteen minims of glycerin in a bottle, and injects under the skin. By amalgamating certain metals with the mercury, these also may be introduced hypodermically.

PARASITE IN LEPRA.—MM. Hillairet and Gaucher have communicated to the Société de Biologie the result of their preliminary experiments instituted for the purpose of ascertaining whether or not a parasite exists in the blood of leprosy patients.

After taking precautions to prevent the introduction of foreign fungi, these investigators found the bacteria of leprosy multiply and develop under their observation, giving rise to chains of articulated micrococci, and to simple and ramifying filaments, presenting the ordinary appearance of the fungoid lower organisms. — *Le Progrès Méd.*, 1880, p. 1039.

SNOW-BLINDNESS, according to Dr. Reed, of Detroit, can be cured by the administration of nitrite of ethyl. — *Canadian Journal of Medical Science.*

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, FEBRUARY 26, 1881.

EDITORIAL.

PROFESSIONAL SECRETS AND THE
LAW.

WE desire to call especial attention to a letter from Dr. Sturgis, of New York, in another column of this issue, because it very ably assaults the position assumed by this journal on a very important subject. There is no more delicate situation in which a physician can be placed than that of the case detailed by Dr. Sturgis. Yet we think the case is not altogether to the point, or, at least, does not afford an objection to a properly-worded law. The immediate context of the paragraph quoted from the code of 1876 is not known to us, but, certainly, in a rightly-constructed code either the paragraph itself or its context should show that the witness-box of a court of justice is referred to, and not the necessary relations of daily life.

Further, we doubt very much whether even the New York law would be influential in preventing revelations in such a case as the one mentioned. Most physicians practising in a State where there were no legal restrictions would hesitate very seriously about making any revelations concerning their syphilitic patients even to a *fiancée*. If they did make such revelations, the law of slander would at least stand *in terrorem* over them, and the fear of it, with the sense of betrayal of trust which must come to a physician so acting even to save an innocent woman, would lead to the disclosures being made in an indirect rather than a direct manner; and we fail to see why this could not be done in either instance. It is, of course, highly improbable that a man would actually

commence a libel suit against the physician; the necessary self-exposure and ruin of character would deter; but this would deter just as much from a prosecution under the New York statute. Again, very probably a judge would decide the disclosure "a privileged communication," and therefore, if true, harmless to the man making it. Public opinion would be too strongly in favor of the doctor for him to be sacrificed, but certainly some loophole also would be found in New York, for it is a gross libel to say that—at least in American courts—justice is blind; or, perhaps, if justice be blind, lawyers and judges are so lynx-eyed that they can always find escape when they wish to and when public opinion demands it.

Of course, occasions would arise in which the law would work hardship, or, possibly, injustice; but we still maintain that these cases must be few, and that their rare occurrence is less painful, less deleterious to the general medical profession and to the individual physician, than the present code, which attempts to make the doctor a legal spy upon those who come to him, and requires him, on penalty of hard labor and the striped jacket of a convict, to act as a detective for the Attorney-General, and report every case of abortion, etc., which comes to his knowledge.

The objections urged by Dr. Sturgis can, it seems to us, be overcome by the alteration of a single word in the law, and we earnestly call the attention of the committee of the State Society to this: let the word "compelled" be substituted for "allowed," and all proper protection and latitude are given to the conscientious physician. The paragraph would then read:

"A person duly authorized to practise physic or surgery shall not be compelled to disclose any information," etc.

PERFUMED CARBOLIC ACID.

Carbolic acid, ℥i;
Oil of lemon, ℥i;
Alcohol, ℥iv.

THE LIBRARY OF THE COLLEGE OF PHYSICIANS.

EVERY lover of medical culture must be well pleased by the growing interest in medical libraries in this country. Both Boston and New York seem to be stirred up in this matter, and, indeed, under the energetic efforts of Dr. Chadwick, in the former city almost a *furor* has been created.

We are delighted, however, to know that our own city still leads. There are now in the library of the College of Physicians nearly twenty-five thousand volumes, of which six thousand are in the Lewis Library. We believe that all the books are in excellent condition, and, after much delay and some abortive attempts, a card authors' catalogue is being rapidly and carefully prepared. It is to meet the expenses of this catalogue that the annual dues of the College have been raised to fifteen dollars; and, the members once accustomed to such payment, there will no doubt be a considerable annual surplus for the purchase of books when the money is no longer needed for cataloguing.

We trust that no attempt at a subject catalogue will be made. Dr. Billings has rendered this an absolute waste of time and money. If the latter article should prove to be embarrassingly plenty at the College, a little of it might well go to help the Index Medicus, which can always be employed as a continuous subject catalogue by ticking with ink such references in it as are in the College library.

CORRESPONDENCE.

February 12, 1881.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES:

DEAR SIR,—From an item in the *New York Medical Record* I note that the medical profession of Pennsylvania, with the encouragement of the *Philadelphia Medical Times*, is trying to secure the passage of an

act not only to render knowledge acquired by a physician during professional attendance a privileged communication, but also to prevent a physician from using such knowledge in any way, shape, or manner.

The argument made in support of such a law is that such a one has lasted for some time in New York State with satisfactory results. Such, however, is not the case. In the last published report of the Transactions of the State Society of New York (1880), the president, Dr. Didama, of Syracuse, in his inaugural address, makes the following remarks, which, as they are so pertinent to the matter in hand, I shall quote in full:

"Some modification seems desirable of the statute forbidding physicians from divulging any information acquired at the bedside of the patient.

"The code of 1876, section 834, reads, 'A person duly authorized to practise physic or surgery shall not be allowed to disclose any information which he acquired in attending a patient in a professional capacity, and which was necessary to enable him to act in that capacity.'

"On the face of it this statute seems to shut the mouth of the educated physician trained to habits of reticence, while it leaves unrestrained the babbling tongue of every unprincipled quack who happens to hold a bogus or forged diploma, and who is, consequently, not 'duly authorized.'

"The courts hold not only that a physician is forbidden to divulge any knowledge affecting the character or reputation of his patient, but that he shall not be permitted to testify to any information which he may have received from the sick person regarding any disease whatever. Gross injustice may result, and probably has resulted, from the enforcement of this law. In one instance within the knowledge of the speaker, where a patient sued a druggist for dispensing too large a dose of medicine, the attending physician was not only prohibited from testifying to the actual facts which he had observed, but was instructed by the learned judge to base his opinion, as an expert, solely on a set of symptoms detailed by the patient and his wife,—symptoms which the physician knew did not exist and could not have been produced by the dose in question.

"The outcome was an unjust and exorbitant verdict against the defendant."

Here, then, it is distinctly asserted that injustice was wrought by this law, or, certainly, by the interpretation of the law, and the physician was made, and in other cases is liable to be made, an unwilling accomplice in what he knows to be a piece of gross injustice.

Nor is this all: he may, by this tying up of his tongue, be made the tool of some unprincipled scamp, and by his silence seem to give assent to what he knows is a piece of downright rascality. The following corre-

spondence, which is taken from the *New York Medical Record* of October 19, 1878, will perhaps illustrate my meaning and the dangers which attend the act as it at present stands. The piece is headed "Professional Secrets and Professional Obligations," and is addressed to the editor of the *Medical Record*:

"I find such a difference of opinion between medical men as to the responsibility of a physician to his patient in certain circumstances that I am induced to ask for a brief space in the columns of the *Record* to refer to the subject.

"It is a subject of vital importance, and should be seriously considered by those whose lives are devoted to the cure and prevention of disease.

"A young man, while under treatment for constitutional syphilis, brought to his physician a lady suffering from some slight temporary ailment. Upon leaving the office, he remarked in effect, 'Doctor, I wish you to cure this young lady soon, as we expect to be married shortly.' The doctor took occasion privately to remonstrate very emphatically with the young man, informing him of the evil consequences which were sure to follow. The reply was, 'I cannot help it: the invitations are out, and I cannot withdraw.'

"The remonstrance was unheeded, the marriage accomplished, and now 'the most beautiful young lady' the physician had ever seen is suffering with syphilis in a severe form, the doctor having reason to fear grave, and perhaps fatal, complications. Thus, through ignorance on the part of the lady, criminality on the part of the man, and 'professional obligations' on the part of the medical adviser, was this work accomplished."*

So far as the legal aspects of the case go, the physician was, in my belief, right, entirely right; but as regards equity, ah! that is another matter, for many of us are sadly aware that law and equity are not by any means synonyms. The law as it stands at present is a gross injustice to all concerned: it gags the mouth of the reputable physician, but permits the gabble of the charlatan. Note well, I pray you, "a person duly authorized to practise," etc. The charlatan is not "duly authorized." It does not protect the physician as a witness, for, while the law seems so to do, the astute lawyer will call upon him as an expert and get all he wants out of him, and often without any pecuniary return to the physician.

More yet. The law converts the family physician into a wolf in sheep's clothing. He knows all that goes on below the surface; he appreciates the danger, he realizes the dreadful consequences, and yet the law, as now applied, forces him into being a scoundrel. Come; put the *argumentum ad hominem*. How would those of us who have

marriageable female relations like to see any one of them engaged to a man whom we knew to be diseased, and whom we could not warn her against for legal reasons or professional obligations? And after the deed is done, how would the doctor feel while looking at the wreck he had helped to make, knowing that but for the law he could have at least done his duty by giving a note of warning? In the parable of the man who fell among thieves most of us are accustomed to regard the priest and the Levite with feelings of contempt; let us as physicians, then, see that we do not by any voluntary act place ourselves in a similar position.

The Medical Society of the County of New York, so far from being satisfied with the law, to its credit be it said, instructed its delegates to request the State Society to examine into the expediency of urging the abolition of this law. What the result may be no man can say; but one thing is certain,—that in New York City many regard the law as unnecessary, injurious, and unjust.

With many apologies for intruding this long letter upon you,

I am, with great respect,

Your obedient servant,

F. R. STURGIS, M.D.

16 WEST 32D STREET, NEW YORK CITY.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, JANUARY 13, 1881.

THE PRESIDENT, Dr. S. W. GROSS, in the chair.

Sarcoma of testicle. Exhibited by Dr. H. F. FORMAD.

THIS tumor was removed from a young man by Prof. Agnew, in the surgical clinic of the University Hospital, in October last. I failed to obtain a complete history of the case, and learned only the following from the gentlemen of Dr. Agnew's clinical service. The patient was about 17 years of age, and in apparent good health. The tumor developed within one year, slowly at first, but later growing more rapidly, reaching, at the time of the operation, the size of a large fist. At no time was there any pain; and the only inconvenience experienced by the patient was from the weight and the size of the tumor. The skin was not involved.

On examination, after removal, the tumor showed itself to be developed from the tissue of the left tunica vaginalis testis: the structure of the testicle was not at all involved, but the whole testicle of that side was simply pushed up into the upper part of the sac, and was much atrophied. The tumor had a thin capsule, was elastically hard in consistence, and on

* The rest of this article is omitted, as not pertinent to my argument.—F. R. S.

section presented a white fibrillated appearance. Microscopical examination revealed the typical structure of large-celled spindle-celled sarcoma.

Dr. S. W. GROSS thought that in this particular instance the tumor had started in the connective tissue between the dartos and tunica vaginalis testis. Sarcoma may arise from the connective tissue of any part, but he considered that the site of the present one was unusual. He also related a case seen by Prof. Gross, presenting the following history. The gentleman had been operated upon in Kentucky for a sarcomatous growth, as was then thought, connected with the testicle, which organ, he stated, had been removed at the operation. Upon careful examination, Prof. Gross determined that the recurrent growth for which he had been consulted was in reality a diseased testis. The former operator had doubtless removed a growth like the present one, which resembled in form a tumor of the testis, and which probably sprang from the connective tissue. Prof. Gross, in operating for the recurrent growth, tied the cord, thus demonstrating the presence of the gland. The wound healed slowly, recurrence took place, despite the use of the actual cautery, etc., and death finally ensued.

Dr. H. F. FORMAD had had no opportunities of observing patients affected with sarcoma of the testis, but it could not be a very rare disease, since he had had sent to him for examination in the past few years no less than nine specimens. Of these, two sprang from the connective tissue; four were of the round-celled variety, and were associated with more or less cartilage; two consisted of ordinary spindle-cells; while one was of the large spindle-celled variety. One of the specimens seemed to have had its origin in an inflammation set up by the injection of iodine into a tumor of the testis. Dr. C. T. Hunter had been consulted some few months subsequent to this, when he found that a number of large nodular growths had formed, which induced him to castrate the man. Microscopically these masses were seen to be sarcomatous, while the bulk of the tumor consisted merely of new inflammatory tissue. In this case, thirteen months after the operation the glands of the neck became involved. In another case, where he had been requested to examine, post mortem, the supposed tuberculous testis of a man dead from phthisis, he had, to his surprise, found that the organ was affected with sarcoma.

Dr. S. W. GROSS asked Dr. Formad whether in his examinations of the round-celled variety he had ever found any traces of gland-structure.

Dr. FORMAD replied that he had in one case.

Dr. J. H. BRINTON recalled the case of a prominent gentleman of this city upon whom he had operated some three or four years back for sarcoma of the testis. The wound healed

readily, but in nine or ten weeks the retro-peritoneal glands became involved, a little later those of the neck, and death rapidly occurred.

Sarcoma of testicle. Exhibited by Dr. J. H. BRINTON.

J. L., æt. 40 years, a farmer by occupation, came under my care in May, 1880. He asserted that the enlargement of his testicle had commenced three years previously. No history of traumatism or other exciting cause could be ascertained. Castration was performed May 5, 1880, and the patient died of pyæmia, June 1, 1880.

A microscopic examination by Dr. S. W. Gross showed that the tumor consisted of large spindle-cells, with here and there a fibrillated intercellular substance. The seminal tubules were dilated, deformed, and lined with columnar epithelium.

Dr. S. W. Gross then read a paper, accompanied by the specimens, upon "Two Cases of Round-Celled Sarcoma of the Testicle, with Local Recurrence and Secondary Deposits after Castration."

Case I.—A laborer, 35 years of age, was sent to me on the 8th of June, 1880, by Dr. T. W. Taylor, of Kennett Square, on account of a smooth and uniform enlargement of the right testis, which was of the size of a large coconut, of an elastic and here and there pseudo-fluctuating consistence, and the seat of occasional pain. About three years and a half previously the testis became greatly swollen from the man being jammed between the wheels of a wagon; but the inflammation gradually subsided, leaving, however, the organ about double the size of its fellow. Fifteen months ago it began to increase, until it finally attained the volume above mentioned. After castration the albuginea was seen to be pervaded by immense tortuous veins; but that tunic was not thickened, nor was the cord involved. Section was attended with the escape of a dirty yellowish fluid, and the cut surfaces were of a translucent grayish tint, and mottled by large areas of blood-stained broken-down tissue and by small spots of caseous degeneration, and they also contained a few cysts. The entire upper portion of the tumor was converted into a cheesy mass as large as a billiard-ball. Microscopical examination disclosed a small round-celled tissue, the intercellular substance of which was granular. There was no trace of seminal tubules.

At the expiration of three months the man began to complain of pain in the belly, and soon afterwards Dr. Taylor discovered a tumor as large as an orange just below and to the right of the umbilicus. The suffering soon became severe and constant; temporary paralysis and cedema of the lower extremities ensued; the bowels could only be moved by purgatives; and nausea and vomiting, which came on every afternoon, continued throughout the night unless he was fully under the

influence of morphia. When I saw him, on December 4, the symptoms had not abated. He was growing thin, had no appetite, and his face was becoming icterode. A small recurrent growth occupied the scrotum. The abdominal tumor, which I was informed had doubled in size in the last ten days, was as large as a child's head, filling the right lumbar and nearly the entire umbilical region, and had an elastic feel. Exploration of the chest disclosed the physical signs of secondary deposits in the upper lobe of the right lung. Death ensued on the 20th of December; but an examination of the body was refused.

Case II.—A farmer, 33 years of age, consulted Prof. W. H. Pancoast on account of a tumor of the right testis, which he said was of four years' duration and had developed in consequence of a blow received in climbing a fence. Its consistence was elastic, its outline smooth and pyriform, and its volume equalled that of a small coconut.

The organ was removed in the usual way on the 24th of February, 1880. The cut surfaces had a medullary aspect, and the minute structure was that of a granulation sarcoma, with entire disappearance of the seminal tubules.

The wound closed promptly, but in two months there was recurrence in the stump of the cord. Early in September the growth had attained the size of a fist, when Dr. Pancoast removed it by laying open the inguinal canal and ligating the cord at the internal ring. The wound healed in four weeks, but on his return to the hospital of the Jefferson Medical College, October 22, it was found to have opened, and there was a fungous mass in the groin as large as an orange, which was scraped away, and the parts freely touched with chloride of zinc. Shortly afterwards a tolerably firm and painful tumor was detected in the retroperitoneal glands of the corresponding side, on which account nothing further was done in the way of surgical interference. At the date of his discharge, December 1, the abdominal tumor was as large as a child's head, and the glands of the left supraclavicular fossa were as big as an egg. The man was decidedly anæmic, and he had been suffering for several weeks from gastralgia, loss of appetite, and almost constant nausea and vomiting.

Remarks.—The cases which have been presented to the Society this evening possess many characters in common, and two, namely, that of Dr. Pancoast and my own, are especially interesting as being examples of reproduction of the disease in the abdominal lymphatic glands and of local recurrence shortly after operation.

Implication of the glands is a remarkable feature in connection with sarcoma of the testis when considered in relation to the immaturity of the glands in sarcoma of other organs. In sarcoma of the breast, for example, as I

have pointed out in my "Treatise on Tumors of the Mammary Gland," involvement of the axillary glands is not met with during life, nor does post-mortem inspection disclose that the deep glands are converted into metastatic tumors. In the disease under consideration, on the other hand, secondary glandular growths are more common than they are in carcinoma of the testis, so that they afford no aid in the differential diagnosis, as is the case in carcinoma and sarcoma of other organs. From an examination of 40 examples of sarcoma of the testis which I have collected from various sources, I find that the histories are complete in 26. Of these, three were well after castration for an average period of six years, two being free from recurrence for two years, and one for fourteen years. Three pursued a natural course, and post-mortem inspection showed secondary tumors in the lumbar glands, bones, and subcutaneous tissue in one, and visceral tumors, without glandular enlargement, in two. Twenty were castrated; of these, one—the case of Pancoast—is still living, with local recurrence and enlargement of the lumbar and supraclavicular glands, and 19 are dead, with glandular implication and visceral deposits, especially in the lungs and osseous system, in 16. Hence, of the 26 cases, in 18, or 69 per cent., the retroperitoneal glands were the seat of secondary deposits; and I find that they are involved in 62 per cent. of the examples of carcinoma. In several of the cases the absence of glandular affection may be explained, as is pointed out by Mr. Butlin in a valuable paper on the subject in the *Lancet*, August 28, 1880, by the short duration of the disease.

The great frequency of the development of secondary growths in the retroperitoneal glands into which the lymphatics of the testis empty, tends to show that sarcoma originates from the endothelial cells of the large lymph spaces which surround the seminal tubules, rather than from the membrana propria of the tubules.

Local reproduction in the stump of the cord or in the adjacent tissues, which constitutes the second interesting feature of the disease, is so uncommon that it was met with in only five of the twenty-three cases in which the histories are complete after operation.

As specimens of sarcoma of the testis have been so rarely exhibited to the Society, I take this occasion to analyze still further the cases which I have collated and to compare them with those of carcinoma. Seventy-five per cent. of all examples of sarcoma occur before the forty-first year, and 25 per cent. before the eleventh year, three having been observed respectively at eight, ten, and eleven months. Fifty-six per cent. of all cases of carcinoma are met with before the age of 41, and 6 per cent. before the age of 11. In sarcoma the epididymis is more early implicated, its growth is more rapid, and its volume is greater; the

scrotum is not adherent, and it ulcerates in only 3 per cent. of all instances; and the cord is involved in the disease in 35 per cent. In carcinoma the scrotum is adherent in 36 per cent. and ulcerated in 9 per cent. of all examples, and the cord is implicated in 63 per cent. of all specimens. In sarcoma the tunica albuginea is rarely thickened, while that occurrence is the rule in carcinoma. In the former affection both testes are not uncommonly affected, while one alone is involved in the latter disease. Finally, the presence of cartilage is so frequent in sarcoma, and so rare in carcinoma, that it goes far to establish the diagnosis.

Of the 40 cases, 22 were of the round-celled, 15 of the spindle-celled, and 3 of the mixed variety.

The prognosis of sarcoma is eminently unfavorable. Thus, of the three cases which pursued a natural course the average duration of life was less than ten months. Of twenty-three patients subjected to operation, three were living at the date of the last reports for an average period of six years (and, strange to say, they belonged to the round-celled variety), one was still alive with local and general reproduction, and nineteen died of generalization of the disease, their average life having been twenty-seven months. Hence castration not only prolongs life, but may effect a cure. The total duration of life from the first observation of the disease until its termination after operation averaged eighteen months for the round-celled and twenty-eight months for the spindle-celled variety; and the former was followed by metastatic tumors in eighteen per cent. more of instances than was the latter.

REVIEWS AND BOOK NOTICES.

LECTURES ON THE SURGICAL DISORDERS OF THE URINARY ORGANS. DELIVERED AT THE LIVERPOOL ROYAL INFIRMARY. By REGINALD HARRISON, F.R.C.S., Surgeon to the Infirmary, formerly Lecturer on Anatomy and Surgery at the School of Medicine, and Surgeon to the Liverpool Northern Hospital. Second Edition, considerably Enlarged. London, Churchill; Liverpool, Adam Holden. Octavo, pp. 398. 1880.

In the volume before us, consisting of thirty lectures upon the surgical disorders of the urinary organs delivered at the Liverpool Royal Infirmary, Mr. Harrison has greatly extended and improved the former edition of his work. The first eleven lectures are devoted to the study of urethral stricture, its pathology, consequences, and treatment, and these matters have been discussed by the author in an essentially practical manner. The key to his treatment is found in the statement—which is, we think, concurred in by the

great majority of surgeons—that when once a stricture has become cicatricial in its character its nature may be palliated or adapted, but the absolute integrity of the urethra can never be absolutely restored. The inconveniences of the scar may be moderated, but the scar itself cannot be obliterated.

The term stricture the author reserves to what is ordinarily spoken of as organic stricture; spasm and inflammation he regards simply, as superadded conditions. Of stricture he makes two forms,—the mucous and submucous,—the former being limited to the lining membrane of the urethra, the latter to the tissues outside of the mucous membrane. The indolent, irritable, contractile, and hemorrhagic strictures are carefully dwelt upon, the treatment of the irritable form being best conducted by Holt's method under anesthesia, while that of the contractile variety can be most effectually accomplished by section,—urethrotomy either external or internal. For the other forms of stricture Mr. Harrison counsels gradual dilatation, employing for that purpose filiform, flexible, and metallic bougies, and availing himself, in proper cases, of the plan of continuous dilatation. At page 115 the author speaks of Dr. Otis's method of treatment, with which our readers are so familiar. He states, however, that his observation is not favorable to this method, and adds, "I have already expressed my belief that stricture in its earliest form is curable, provided that dilatation by bougies is sufficiently carried out. Hence I reserve for internal urethrotomy cases which are not likely to be benefited by dilatation, and these, as far as my experience goes, do not include strictures in their early stage."

The lecture upon the surgical anatomy of the urethra is very valuable, and the attachments of the various fasciæ are carefully given, and their influence in guiding urinary extravasations is lucidly set forth, and well illustrated by the cut at page 29. The fourth lecture is devoted to the examination of the urine, its acidity, alkalinity, the occurrence of ammoniacal decomposition, and the resulting therapeutical suggestions. Urethral fever forms the subject of the sixth lecture. In the opinion of the author, this condition depends, to a greater or less extent, upon renal engorgement or thrombosis, and its treatment may be best conducted by remedies looking to the restoration of the renal excretion. He advises, therefore, vapor baths, hot baths, blanketing, dry cupping, and other local means of that nature, and, internally, the use of the infusion of digitalis, as suggested by Dr. Gouley, of New York. He adds, moreover, that prevention is better than cure, and expresses his belief that if after every operation likely to cause urethral fever a free state of diaphoresis should be established by hot blankets and suitable temperature we should hear but little of urethral fever.

At page 95 we find a most important statement, with which our own experience largely concurs,—namely, that urethral fever depends upon nerve-shock, and that where anæsthetics have been used for catheterism there is almost a complete exemption from this disagreeable condition. In the lecture devoted to retention of urine from stricture the use of the filiform bougie and turreted catheter is advised before the surgeon arrives at the conclusion that the stricture is for the time impassable. We think our author might in this matter have gone farther than he does, and we would suggest, from our own experience, that in the worst cases of retention it is probably always possible to introduce, under anæsthesia, a whale-bone filiform bougie. If such an instrument be once carried through the stricture and into the bladder, the urine will surely escape by its side sufficiently to relieve the bladder for the time, and, in the course of a few hours, to evacuate the organ entirely. We believe that the use of the aspirator is rarely called for, and certainly not until the means mentioned have been fairly tried.

We are unable, within the limits assigned to this short notice, to follow our author in his most interesting remarks upon internal, external, and subcutaneous urethrotomy, urethral abscess, extravasation of urine, perineal fistulæ, and foreign bodies in the urethra and bladder. We cannot forbear, however, from noticing the chapter upon irritable bladder, which we especially recommend to the consideration of our readers. The lectures upon hypertrophy of the prostate and its treatment are also well worthy of perusal. In the treatment of obstructions of this nature near the neck of the bladder Mercier's treatment by internal incision of the prostate is alluded to, but we are told that it can scarcely be said "at present to have a place in the operative surgery of the urinary organs." The use of ergot, as advised by Dr. Atlee, of this city, in cases of difficult micturition in connection with enlarged prostate, is favorably spoken of. The remainder of the work is occupied with the study of calculous disorders, lithotomy, lithotripsy, lithoplaxy (which the author highly esteems), the surgery of the kidney, vesical and prostatic tumors, and sundry other affections.

All of these topics are treated of in a practical manner, and every reader of these excellent lectures will feel, we are sure, that his time has not been misspent. The author has, we think, succeeded in making a most useful book, one to which any surgeon may turn with pleasure and profit. In some instances, perhaps, his views may be peculiar, but they are his own, and, coming from one who has thought much and has had much experience in the active practice of the surgery of the urinary organs, they must command respect. We sincerely wish this book the success it deserves, and we congratulate the author

upon the result of his labors in preparing this new edition.

HAND-BOOK FOR CORONERS. Containing a Digest of all the Laws in the Thirty-Eight States of the Union, together with a Historical *Résumé* from the Earliest Period to the Present Time, a Guide to the Physician in Post-Mortem Examinations, and Valuable Miscellaneous Matter never before collated. By JOHN G. LEE, M.D., Coroner's Physician of the City and County of Philadelphia, Pa. Published by William Brotherhead, Agent, 129 South Thirteenth Street, Philadelphia, 1881. 8vo, pp. 288.

The author of this little volume, with its somewhat elongated title, announces in his preface that he "makes no pretensions to originality," but that his "almost sole duty has consisted in the collection, selection, and arrangement of the most interesting material at his command." This, of necessity, disarms all criticism of the book as an original production. The "material" thus used appears to have been judiciously employed for the purposes designated. The author gives us a pretty full history of "coroner's law" from its earliest inception, in the time of England's great King Alfred, down to the present era, including the laws of all the different States of our own country. In fact, more than half of the volume consists of a detail of these latter State laws, which exhibit a general similarity of character, while at the same time showing some points of difference: thus, in some of the States the coroner's law is more stringent than in others, and there is a notable diversity in the fees of the office. These latter fluctuate between one dollar (for an inquest) in West Virginia and twenty-five dollars in Louisiana. In the cities of Philadelphia and New York, instead of a fee paid for each separate inquest, there has within a few years been substituted a regular salary for the coroner,—six thousand dollars in the former city and five thousand dollars in the latter, exclusive of contingent expenses.

The chapter on the "Coroner's Physician" contains much interesting matter, but only the usual subjects discussed in the standard works of legal medicine,—such as medical evidence, expert testimony (in the latter, by the way, the author is mistaken when he asserts that in Pennsylvania the expert may legally demand an extra compensation), the mode of making autopsies, the signs of death, etc.,—all of which, however, are given with sufficient precision and judgment. The book concludes with a series of anecdotes—some of them quite racy—of coroners and their juries. G.

PRACTICAL AND ANALYTICAL CHEMISTRY. By FRANK CLOWES, D.S.C. Lond. H. C. Lea's Son & Co., Philadelphia.

This small treatise is a hand-book for use in the laboratory, detailing a long series of

experiments, analyses, etc., for use by students of chemistry. Whilst very valuable in the position for which it is intended, to the busy doctor of to-day the manual is chiefly interesting as an evidence of progress and as provocative of energy towards the medical students of the present. The book is neatly gotten up as a reprint from the third London edition.

ROCKY MOUNTAIN HEALTH-RESORTS. An Analytical Study of High Altitudes in Relation to the Arrest of Chronic Pulmonary Disease. By CHARLES DENISON, A.M., M.D., etc. Second Edition. Boston, Houghton, Mifflin & Co., 1881. Pamphlet, 12mo, pp. 192.

Dr. Denison's personal and professional experience in the Rocky Mountain region has induced him to write this little book, with the view of guiding both the invalid and the patient in the choice of a health-resort. After an introductory chapter on consumption and its prevalence, the author goes on to discuss climates of low, medium, and high altitudes in successive chapters, and then continues by a full description of the climatic characters of the Rocky Mountain region, its mineral springs, etc., the remaining chapters being devoted to the consideration of the various disease-conditions apt to be influenced by climate, together with the effect which the Rocky Mountain climate in particular produces on those conditions. The two last chapters are devoted to precautionary measures, hints for invalids, ranch life, camping out, etc. The book is one of the most valuable which has yet appeared on the subject of which it treats.

JOHN HUNTER AND HIS PUPILS. By S. D. GROSS, M.D. Philadelphia, Presley Blakiston, 1881.

This is a very entertaining and thoughtful account of the life of John Hunter, with notices of some of his most eminent pupils, the whole being comprised in a book of one hundred and six pages and prefaced by a very excellent phototype of Reynolds's famous portrait of Hunter. The study is worthy of both its author and its subject.

DIAGRAMS OF THE NERVES OF THE HUMAN BODY. By WILLIAM HENRY FLOWER, F.R.S. Third Edition. Presley Blakiston, Philadelphia, 1881.

We are very well pleased to announce a new edition of this practical and well-known brochure. The diagrams are very nearly the same as in the last edition, having been only amended in a few points.

CHLORATE OF POTASSIUM IN MARASMUS.—Dr. Herbert Sum has used this drug in two- or three-grain doses four times daily in an infant a few weeks old with very good result. —*British Medical Journal*.

GLEANINGS FROM EXCHANGES.

DANGERS OF UTERINE MANIPULATIONS AND OPERATIONS.—Dr. George J. Engleman, in a paper read before the State Medical Society of Missouri, referred to the following instructive cases. The first was of a married lady suffering with retroversion and syphilitic ulceration of the os. During the treatment the uterus had been frequently and easily replaced by means of the sound, and held in place by cotton tampons in the posterior cul-de-sac. After an interval of several months the patient again consulted her physician for pains in back and thighs following unusual exertion. Retroversion, but no inflammation or erosion, was found. The uterus was replaced, as usual, after the introduction of the sound, and the physician advised her to lie down quietly until he should see her upon the following day. This was at 11 A.M. At 4 P.M. he was hastily summoned, and found his patient in a state of great nervous prostration, with high fever, temperature 103° – 104° , headache, nausea, and vomiting. A severe chill, lasting from 2 P.M. until 2.30 P.M., had preceded the fever. Physical examination revealed considerable abdominal distention and tenderness, with some slight tenderness about the cervix. These symptoms subsided within forty-eight hours under a treatment of opium with large doses of quinine, and steady improvement followed. The sound, as a repositor, has never been a very safe instrument.

In a second case, a patient suffering from retroversion and chronic endometritis, the uterus was movable, easily restored, and kept in position by a tampon of cotton soaked in glycerin, and every six days an application of the compound tincture of iodine was made to the womb. Two or three hours after one of these applications the patient was seized with violent pelvic pains in the region of the uterus and ovaries; they were intense, but not accompanied by any decided evidences of inflammation, although there was some elevation of temperature, tenderness on pressure, nausea, and vomiting. Within thirty-six hours the symptoms subsided, upon the use of quinine and opium, and hot applications to the abdomen. Dr. Paul F. Munde, of New York, told Dr. Engleman that he had in two instances only, out of several thousand applications of iodine which he had made, seen cellulitis arise.

The third case was that of a woman of 23, who was placed upon treatment for slight ulceration about the os uteri and a retroversion, seemingly the result of chronic metritis. During nine months of treatment various remedies were used, such as vaginal injections with sulphate of zinc, acetate of lead, and tannin. Applications to the ulcerated portion of the cervix were made with nitrate of silver and dilute acid nitrate of mercury. The latter had a good effect, but was discontinued, and

tincture of iodine substituted. The patient was rapidly improving, both locally and constitutionally, when, after one of these applications of iodine to the cervix,—which were made every two weeks without entering into the cervical canal,—she was attacked with peritonitis, and soon died, without a known cause to account for the fatal issue.

The fourth case was one of death from intra-uterine injection of iodine, made for the purpose of checking hemorrhage.

A fifth case was one of metro-peritonitis and death following an intra-uterine injection of a warm and dilute solution of tinct. ferri chloridi.

A sixth case was one of intense pelvic pain and threatened peritonitis following the use of a Davidson syringe.

Apropos of this, Dr. Engleman says, "In order to obviate the dangers and the discomforts arising from vaginal injections as ordinarily used, I advise my patients (1) to plug the central opening of the vaginal attachment; (2) to assume the semi-recumbent, better the recumbent, position, with knees drawn up; (3) never to use a strong current, whether by the fountain- or the bulb-syringe."

After adding several cases of severe accidents and death following the use of spongetents, Dr. Engleman remarks, "Care and cleanliness, if not Listerism, are necessary in even the most trifling uterine operations, and the strictest surveillance should be exercised over the patient during the after-treatment, even if this consists in nothing more than rest—absolute rest—and cleanliness. This is all the more necessary as a patient after a slight operation may suffer neither fever nor pain; on the contrary, the happy effect of the operation may already have shown itself: she is free from all the annoying aches and pains of which she complained before the operation, and considers herself accordingly well and at liberty to move about as she pleases.

"Rest and careful attention during the after-treatment are extremely important features; and yet, with all care, dangerous and fatal results may occur. Very few of the text-books which you may consult before attempting an operation will tell you anything of its dangers, unless it be an ovariectomy or a similarly serious undertaking. They will tell you how to operate, but will not detail the minute precautions to be observed in the operation, or counsel you how careful to be of the patient after she has been operated on, as she ceases to be an object of interest when once the aspiring surgeon has cut."—*American Medical Journal*.

A NEW METHOD OF OPERATION FOR RANULA.—Dr. Krabbel (*Centralblatt f. Chirurgie*, No. 37, 1880) reports the successful removal of a large sublingual cyst by a method not hitherto described. It is well known that, apart from complete extirpation, the ordinary methods, such as puncture, the injection of irritant fluids, partial excision, etc., by no means always result in a complete cure.

Krabbel recently had occasion to observe a large ranula, in which previous remedial measures had been unsuccessful. He adopted a plan of operative procedure which was suggested to him by a consideration of Volkmann's method of radical operation for hydrocele. Accordingly, the sac of the cyst, which formed an externally visible prominence, was exposed by an incision from without, and an oval piece of its wall excised. The cyst-wall was now united by silk sutures with the integument; then a second piece was incised from within, and the walls similarly united with the buccal mucous membrane. A drainage-tube was inserted, and carbolic irrigation practised. All the dressings were antiseptic. Eight days later the drainage-tube was removed, and the wound soon closed by granulation, the collapsed cyst-walls becoming united by adhesive inflammation. The external cicatrix was quite inconspicuous, and internally there only remained a little hardening to indicate the site of the former cyst.—*Allg. Med. Cent. Zeit.*, September 22, 1880; *New York Medical Record*.

ACTIONS AND USES OF CERTAIN REMEDIES EMPLOYED IN BRONCHITIS AND PHTHISIS.—In an article on this subject (*Lancet*, vol. i., 1881, p. 4) Dr. T. Lauder Brunton says that as coughing is a reflex act, excited by irritation applied to a sensory nerve and reacting through a nerve-centre upon the respiratory muscles, it is obvious that it may be lessened either by removing the source of irritation or by diminishing the excitability of the nervous mechanism through which it acts. Both methods are employed in medicine. One of the commonest is that of lessening irritation by the use of glutinous and saccharine substances. These probably act by soothing that part of the irritation which is situated about the root of the tongue and the fauces, thus relieving the cough, though the irritation in the bronchial tubes or lung may remain as before. The power of substances to relieve cough depends, no doubt, to a great extent either on their covering the inflamed and irritated surface directly with a mucilaginous coat and thus protecting it from the action of the air or from irritation by other substances passing over it, or by exciting an increased flow of saliva or mucus, which has the same effect. Sedatives, as opium, hyoscyamus, and chloroform, have a certain amount of local action on the peripheral ends of sensory nerves and lessen their sensibility to impressions. This action, though slight, is increased when they are given in a mucilaginous vehicle. Of course there is also a less direct action through absorption by the stomach.

When the source of irritation is in the afferent nerves of the bronchi or of the lung itself, mucilaginous and sedative drinks are of course useless. Here vapor of conium or hydrocyanic acid tends to lessen irritability. Other inhalations, as of spray of ipecac and

essential oils and terebinthinate substances, alter the nutrition of the mucous membrane in such a way as to diminish the irritation which the abnormal condition of the membrane exerts upon the nerves. In laryngeal phthisis local applications with a brush or by blowing powders directly on the diseased surface are the best means. A useful application is a powder of one-sixth grain of morphia to two grains of starch. This mixture is placed in a tube and blown down the throat at the moment the patient takes a deep inspiration. The following prescription of Dr. Warburton Begbie is analyzed by Dr. Brunton:

R Liq. morphiæ hydrochlorat.,
Acidi hydrocyanici,
Chloroformi, aa ℥xvii;
Spiritus chloroformi,
Acidi nitrici dil., aa f3j;
Glycerinæ, f3ij;
Infus. cascariellæ
(seu infus. quassia), f3ij.—M.

A sixth part to be taken three or four times a day.

Here the sedatives—morphia, hydrocyanic acid, and chloroform—tend to lessen the excitability of the respiratory centre; the glycerin tends to retain the sedatives in longer contact with the throat, and acts also to some extent as a nutrient; and the nitric acid and bitter are supposed to have a tonic effect on the stomach. In what way this tonic effect is produced we cannot at present say; but we may imagine that they will in some way partially counteract the effect of the congestion which the cough produces, and, exciting appetite, will counteract the influence of the morphia. Nitric acid has also, as Dr. Brunton points out, a definite effect on the secretions of the lung themselves. Considering those drugs which tend to lessen congestion, Dr. Brunton mentions digitalis, and gives the following prescription from Beasley as used by Sir A. Crichton:

R Succii limonis, f3ss;
Potassii carbonat. ad saturand.;
Decoct. sarsaparillæ, f3x;
Tinct. digitalis, ℥x ad xxx;
Mucilag. acaciæ, f3x.—M.

To be taken every sixth hour. The tincture of digitalis here tends to contract the vessels, diminish pulmonary congestion, and lessen cough. The potash renders the pulmonary secretion more fluid and abundant. Warm food, as beef-tea, Dr. Brunton says, is a good expectorant, as also is cod-liver oil. Ice, hydrocyanic acid, and alum are recommended in the vomiting of phthisis.

RELATIONS OF GOITRE TO PREGNANCY AND GENERATIVE DERANGEMENTS OF WOMEN.—

Dr. Edward W. Jenks, in a very interesting article in the *American Journal of Obstetrics* for January, speaks of the comparative frequency of enlargement of the thyroid among women, and calls attention to the relation between this enlargement and certain changes

in the generative organs. The connection has not until recently been touched upon by medical writers except in the most cursory manner. Regarding the etiology of goitre, its appearance, in countries where it is endemic, is coincident in most cases with the arrival of puberty. It is also probable that puberty may enter to some extent into the causation of sporadic goitre. When menstruation is once established, it frequently happens that at each return of the menstrual period the thyroid gland becomes the seat of a fluxion, more or less marked, which disappears with the cessation of the catamenia. Dysmenorrhœa and amenorrhœa sometimes influence the rapid development of goitrous tumors. These are generally firm and elastic, and may be extremely painful or quite insensible on pressure, but are almost always the seat of much discomfort during menstruation. They are, as a rule, quite amenable to treatment, and those which come most rapidly are often the first to disappear, sometimes going spontaneously.

Of all the goitres which have connection with the uterine functions by far the most numerous are those which are produced or increased by pregnancy and labor. These are not usually dangerous; although fatal cases have been reported. One form of goitre may occur suddenly in the middle of labor. After dealing with the pathology and diagnosis of thyroid tumors, Dr. Jenks goes on to speak of their treatment. First, he recommends a change of climate to a country where goitre is not endemic, and, second, a strict observance of hygienic and dietetic laws. As to medicines, iodine stands first. Interstitial injections with the following solution—iodide of potassium, one gramme; tincture of iodine, twenty cubic centimetres; distilled water, forty cubic centimetres—may also be employed. The strength of this solution may be altered by increasing or diminishing the amount of the tincture of iodine to suit the exigencies of the case. Other preparations of iodine may be used. Ordinarily a single injection suffices. Alcohol is also used in the same way. Perchloride of iron injections are used in vascular goitres, also chloride of zinc solution. Digitalis, with ergot, quinia, and iron, is recommended for internal use, and electricity has been highly recommended by several authorities. Prof. Pepper urges hypodermic injections of ergotin. A solution of ninety-six grains to the ounce is made, and fifty to seventy-five centigrammes of this may be injected every two or three days. Dr. Jenks also details various surgical operations for the relief of the affection.

TANSY-POISONING.—Dr. Gallaher (*Pittsburg Medical Journal*, 1881, p. 22) gives the case of a patient who had taken an infusion of perhaps half an ounce of the dry herb one night before going to bed. Vomiting and purging ensued within a few hours, but in the

morning the patient felt better. By three o'clock in the afternoon, however, the vomiting and purging had recurred, together with intense abdominal pain. These symptoms continued until two the next morning, with thirst, great pain in the epigastric and umbilical region, shallow and rapid breathing, and failure of the pulse. There were neither convulsions, coma, nor paralysis. The patient's intellect was clear. She died twenty-six hours after taking the tansy.

Dr. Gallaher also gives the following case. He was called at twelve o'clock at night to a lady who had taken the oil of tansy instead of the infusion. She had been taking this substance in small doses without effect—that is, to bring on her menses—for several days, but, finding such doses inoperative, concluded to take a larger amount. Nearly half a teaspoonful was accordingly taken at about ten o'clock P.M., when about retiring. Before twelve the same night—that is, two hours after taking the oil—she was awakened by a dreadful burning and pain in the stomach and ringing of the ears. When the doctor arrived, she was cold, and for a time pulseless. An emetic of ipecac speedily evacuated the stomach, when she felt better. In a short time there was a restoration to usual health, without a return of the monthly flow.

POISONING FROM ANILINE.—Dr. Merklen reports (*Medical Press and Circular*, 1880, p. 498) the following case coming under his notice:

The toxic effect of aniline is better known by experiments on animals than by the effects of the poison observed in man. Those working in aniline-factories may exhibit the phenomena of chronic poisoning resulting from the absorption of the substance by the respiratory passages in the form of either vapor or dust; acute poisoning is rare. In the following case one hundred to one hundred and twenty grammes of pure aniline were swallowed in a liquid state: this method of absorption, with the symptoms caused by the poison, and its prompt cure, constitute the interest of the case.

A workman in a chemical factory at Clichy, on July 11, swallowed at 8 A.M. from one hundred to one hundred and twenty grammes of a mixture of aniline and toluidine, mistaking it for coffee. In spite of this he went to work as usual, without telling any one, and it was not till a quarter to ten—that is, an hour and three-quarters after the swallowing of the poison—that his fellow-workmen saw that he was stupid and motionless. Being interrogated, he told them the mistake he had made, and complained of a little headache. M. Gundelach, the chemist to the establishment, who has supplied most of these details, was immediately called, and administered .05 centigramme of emetic; the effect of the medicine was assisted by introducing the finger into the pharynx and administering

large quantities of warm water. Under this treatment abundant vomiting was produced, composed of some food, water, and yellowish coloring-matter, probably unabsorbed aniline. The patient was then put to bed. About twenty minutes afterwards serious nervous phenomena appeared. The patient lost consciousness, fell into a state of coma, and appeared in a condition of general resolution, the head fallen back, lips black, face purple. Then there was contraction of the facial muscles, *risus sardonius*, and trismus, which only permitted the introduction into the mouth of a few drops of milk with great difficulty. At this time there was no convulsion, no contraction of the limbs, pulse very feeble, coldness. This was about half-past ten, two hours and a half after the taking of the aniline. All means were used to introduce some alcohol: at length the patient swallowed a few drops, and immediately seemed to awake. This remission was taken advantage of to make him swallow a larger quantity of alcohol, and of tea with alcohol. To overcome the cold, the patient was warmed with coverings and bottles of hot water and the whole body rubbed with camphorated spirit. He regained consciousness, and vomiting returned. At half-past twelve two enemata with oil were given, without result. About two o'clock the patient again lost consciousness; the pulse became weak, cyanosis remained, though less marked than at first. About three o'clock appeared clonic convulsions of the limbs, with complete loss of consciousness; the contraction of the face and the maxilla had disappeared.

At this time the patient was taken to the Hospital Beaujon, where he was received under the care of Dr. Millard. The interne, on arrival, found him in a state of profound coma; the pupils dilated, acting little under the influence of light. Catheterism gave exit to about two hundred grammes of dark brown-colored urine. Death was considered imminent. The coma lasted all night, interrupted frequently by convulsive attacks in the limbs. During all this time the face was purple.

Next morning, at the time of the visit, the patient was awake, and complained only of severe headache; the face, especially the lips, still slightly cyanosed. No other abnormal phenomenon. Sensibility normal everywhere except in the velum palati and the pharynx, where tickling produced no reflex action. No paralysis. The patient had passed urine spontaneously. This was very dark in color, albuminous, and gave a strong alkaline reaction, while that of the evening was acid and not albuminous. No pain in the belly; no stool yet since the accident. A strong odor of aniline proceeded from the patient's bed, apparently coming from his clothing. Ordered milk, purgative enema, bath. The next day and succeeding days the headache disappeared. Urine still dark, but very slightly albuminous. The patient left the hospital after

five or six days, with no symptom remaining but the anæsthesia of the soft palate.

The blood examined the day after the accident showed nothing abnormal in the shape of the red corpuscles. Number, 4,200,000. Temperature on that day, 37.6 C. (99° Fahr.). The urine was analyzed by M. Gundelach: that of the evening only contained aniline unchanged; there was no trace of it in that of the morning, the alkalinity of which was due to carbonate of ammonium.

Remarks.—There are some peculiarities in this case. In the first place, in spite of the assertions of the patient, it can scarcely be allowed that he had swallowed more than one hundred grammes of aniline. We know, indeed, that fifteen or twenty drops are sufficient to cause in a rabbit toxic, often fatal, effects: it is probable that the patient immediately rejected some of the liquid swallowed, owing to its slight causticity. The first effects of the poison were not shown till about two hours after its introduction, and these effects progressed to coma and convulsions, as in experiments on animals. The most recent of these experiments, made by Leloir, prove that aniline causes convulsions and asphyxia by acting primarily on the hæmoglobin of the blood, of which it diminishes the absorbent power. We can understand from this why the effects do not appear more rapidly.

As special troubles we recall the transitory albuminuria, well in accord with the hypothesis of an alteration of the blood, and the anæsthesia of the velum, which remained even when the patient left the hospital. The troubles of sensibility in aniline-poisoning have been cited by several authors, recently by Grandhomme, who in patients poisoned by aniline vapor found absolute cutaneous anæsthesia. In our patient the anæsthesia was localized in the throat, but was persistent.

The treatment of this form of poisoning consists simply in the administration of stimulants with cutaneous revulsives. It is necessary to add evacuates in those special cases where the poison has been introduced by the digestive passages.

RECENT REMEDIES.—Dr. James Sawyer (*Practitioner*, January, 1881, p. 39) thinks that much may be gained by practising physicians if each one will give his experience of such remedies as he has employed in his own practice. Dr. Sawyer adds his own experience:

Fuchsin he has used in doses of one grain thrice daily in albuminuria probably dependent upon chronic contracting kidney. He gives the remedy in pills, one-grain doses, made up with extract of gentian, to which may be added a little carbonate of iron or reduced iron. It colors the fæces and urine pink, but produces no subjective symptoms. He considers it the best remedy he has used in renal albuminuria.

Nitro-glycerin Dr. Sawyer has used in two cases of angina pectoris. In the first case, an

elderly man with a fatty heart, no apparent benefit ensued. In the second case, that of a middle-aged man with chronic valvulitis and aortic stenosis and incompetence, marked relief was obtained. Dr. Sawyer does not mention the dose given, but he reminds us that Dr. Murrell, who introduced the remedy, gives one-drop doses of a one per cent. alcoholic solution in half an ounce of water thrice daily. The dose may be increased gradually up to fifteen minims.

Salicylate of sodium has been employed with success by Dr. Sawyer in diabetes. He gives it in a mixture containing fifteen grains of the salt with seven minims of tincture of opium thrice daily. One of his patients has been practically cured by this treatment, while others have been much benefited. He does not make any dietetic restrictions.

Ingluvin Dr. Sawyer thinks will prove a valuable addition to our materia medica. He has found it useful in atonic dyspepsia in doses of ten grains thrice daily, in powder sprinkled on bread, immediately after meals. In one case of the obstinate vomiting of pregnancy ingluvin was used with perfect success.

MILK-DIET IN HEART DISEASES.—Prof. Potain concludes a somewhat lengthy paper on this subject as follows. The "*régime lacté*" is particularly efficacious in secondary cardiac disease,—that is, in simple hypertrophy or dilatation of renal or gastric origin. In one case the milk-diet favorably alters the condition of the kidneys, and in the other the gastric state. But, in order to give these organs the needed repose, it appears essential to make the milk-diet absolute, and to prolong it for a greater or less length of time. A good effect of this regimen is also observable in those cases of simple reflex palpitation which depend upon gastric disturbance. In dropsy accompanying secondary renal lesions, the diuretic action of milk may act advantageously. This exclusive milk-diet can, however, be persisted in only when the system readily tolerates it.—*La Tribune Médicale*, September 19, 1880; *New York Medical Record*.

EPITHELIOMA OF THE VAGINA—OCCLUSION OF THE COMMON ILIAC VEIN—PYÆMIA.—Mr. Bellamy (*Med. Times and Gaz.*, 1880, p. 510) had under his care a woman of 58, who, following a strain, had a swelling on the left side of the vulva and in the groin, with a watery discharge from the vagina. This discharge continued, and in a week or two was of a dirty-white color. About a week after the accident the left leg began to swell, at first the ankle, and afterwards as far up as the thigh. The whole lower limb then became of a dusky-red color, and was very painful, the pain being of a throbbing, tingling character. She was able to go about a little for six weeks, but after that was confined to bed. She did not improve, and, as her general health was suffering, she applied for admission to the hospital on April 19, 1880.

On admission, the left leg was much swollen and brawny to the feel. There was considerable oedema, but no special hardness over any of the veins. The surface of the skin was not hot, nor was there any undue tenderness on pressure. There was some discharge of a dirty-green fluid from the vagina. Some obstruction was felt in the rectum on attempting to pass fæces. On examination per vaginam, a nodulated tumor was found involving the whole of the left wall; its surface was ulcerated and discharged thin and very offensive pus. The left labium majus was affected by a nodulated growth, also ulcerated on the surface. The rectum was apparently implicated in the growth. No examination could be made, however, on account of the pain caused. Hot fomentations were applied to the leg, with some relief to the pain and tension, and local applications were ordered for the vagina. No special alteration occurred in the patient's condition for about six weeks.

On June 3 the discharge became more profuse and offensive, and on the evening of June 6 the patient had a severe rigor; the temperature went up to 103° , and, later, to 104.6° . The patient complained of feeling weak, and was extremely depressed; there was slight pain and tenderness in the hypogastric region, and the discharge from the vagina was profuse and somewhat bloody.

On June 8 a red blush appeared on the abdomen, and she complained of pain there. The left foot was swollen and erysipelatous-looking, and, later, fluctuation was found about the ankle-joint.

The patient died June 10. At the post-mortem examination the posterior wall of the vagina and the lower end of the rectum were found to be the seat of an ulcerating epitheliomatous mass. The lymphatic glands of the pelvis were enlarged, and those on the left side so much so that they pressed on the common iliac vein, and so had given rise to the symptoms in the left leg.

NITRO-GLYCERIN IN ACUTE AND CHRONIC BRIGHT'S DISEASE, AND IN THE VASCULAR TENSION OF THE AGED.—Dr. A. W. Mayo Robson (*Brit. Med. Jour.*, 1880, vol. ii. p. 803) has given nitro-glycerin in these cases with great benefit. A man of 56, with puffy eyelids and oedematous legs, a pulse tense and corded, the heart greatly hypertrophied, and breathing labored and difficult at times, was given a one-per-cent. solution of nitro-glycerin in one-minim doses every half-hour till its physiological effects were produced. It relieved the asthmatic symptoms so effectually that the patient would never afterwards be without it. After taking the medicine in three-minim doses thrice daily for a week, the urine, of which only a pint and a half daily, of specific gravity 1008, and very albuminous, had been passed, was now voided to the amount of three pints, specific gravity

1012, and almost free from albumen. This patient continued to take the medicine for some months, with great amelioration of the symptoms.

Dr. Robson mentions another similar case, in which the relief gained was equally striking. In the case of a woman of 52, who had had one slight apoplectic seizure and was threatened with another, and where the pulse was hard and corded and all her vessels indicated increase of tension, nitro-glycerin was administered in one-minim doses thrice daily, with the result of removing entirely all symptoms of dizziness, etc. In the subsequent history of this patient, a dose of the remedy has been taken whenever dizziness has begun to come on, with the result of relieving the symptoms, and, as may be supposed, of averting for the time a threatened attack of apoplexy.

A case of angina, or of anginaform attacks, appeared to be cured by the use of the nitro-glycerin. Other interesting cases are detailed by Dr. Robson, in which patients suffering an attack of acute nephritis were quickly relieved and cured.

Dr. Robson says, in conclusion, that whether the vascular tension which is the symptom treated be due to chronic kidney-mischief or to arterial fibrosis, this condition is unquestionably relieved by nitro-glycerin, and with the diminution of pressure, in his experience, improvement inevitably follows, though in some cases it may be only temporary.

CONTINUED ELECTRO-GALVANIC CURRENT IN AMENORRHOEA.—Dr. R. R. Good (*Med. Times and Gaz.*, 1880, p. 562), in a case of cervico-brachial neuralgia, applied the electro-galvanic current not only to the affected parts, but to the nerve-centres, the upper part of the spine, and the superior cervical ganglion. When, after three months of this treatment, he was able to discharge the patient cured of her neuralgia, he found that she was also cured of a stubborn amenorrhœa which had resisted every internal remedy. As the poles had not been applied to the pelvic viscera, Dr. Good was loath to attribute any peculiar virtue to the electricity thus applied; but further experience now justifies him in asserting the high value of this remedy.

The continued current can find its application only when the affection is due to an inertia of the utero-ovarian apparatus, to a disturbance in the circulation, or to defective nutrition. To resort to galvanism when the evil has its origin in a mechanical obstruction would, of course, be useless. From five to thirty-seven days were required to effect a cure in Dr. Good's cases. The descending current was employed, with twenty to thirty elements for the upper part of the spine, the lumbar and ovarian regions, and from six to ten elements for the sympathetic nerve, applied along the inner border of the sternocleidomastoid muscle.

MISCELLANY.

ON THE ADMINISTRATION OF MEDICINES IN DROP DOSES.—J. B. Moore (*Druggists' Circular*, February, 1881) says that medicines should rarely be prescribed in drop doses when it can be avoided, and more especially if the remedy be of a potent, poisonous, or corrosive nature, as it is often very hard to adjust the dose with any degree of accuracy, owing to the difficulty many persons experience in dropping a liquid, and the uncertainty of drop quantities. It often happens, in dropping a medicine from a bottle a little too full or with a badly-formed lip, that the most steady and practised hand can with difficulty drop a dose even with a near approach to accuracy. A few drops too many will sometimes flow out before they can be checked, and the medicine then has to be returned to the bottle and the process repeated again, perhaps with the same result, and to the utter disgust of the person to whom the unpleasant task is delegated. To the nervous and care-worn attendants who are so frequently found in the sick-chamber, the task of dropping medicines becomes doubly irksome and annoying, and especially when it has to be done, as in cases of lingering illnesses, day and night, sometimes for weeks at a time. Besides, it is sometimes impossible, no matter with how much care and judgment the dropping is performed, to prevent the number of the prescription and the directions on the label from becoming defaced, if not entirely obliterated, as is often the case, and the outside of the bottle from becoming stained and bedaubed with the liquid, and especially if it be any of the stronger acids or any of the iron preparations. And the trouble does not always end here, for the hands are liable to be stained, and the clothing, the furniture, or any damageable article that the medicine may come in contact with may be ruined or soiled. Furthermore, medicines which are prescribed in drops are usually very concentrated and powerful, and are often of a very corrosive nature, and therefore the more dangerous to keep about the house and in the sick-room.

There are cases, however, where it is desirable and even necessary for the physician to prescribe his remedies in as compact and as concentrated a form as possible. For instance, when the patient contemplates travelling from home, or when his occupation is of a migratory character, in such cases he may desire to carry the medicine in the pocket or travelling-bag.

Almost all corrosive, pungent, poisonous, and concentrated liquid medicines require to be diluted by the patient at the time of taking, which is often very inconvenient and troublesome; whereas if this were done by the pharmacist it would at once not only strip the medicine to a great extent of its noxious or dangerous properties, but would also ex-

empt the patient or attendant from a very unpleasant task; then, if the medicine should happen to be taken by mistake, or innocently by children, a large quantity will perhaps have to be swallowed to produce fatal, or even dangerous, consequences. Many cases of injury and poisoning have followed the taking of very active and concentrated medicine by mistake which has been brought into the family on the prescription of a physician. Many medicines, like carbolic acid, liquor potassæ, and the various mineral acids, etc., are noxious chiefly in virtue of their corrosive nature, and when they are diluted are comparatively harmless and safe to keep in the household.

Besides, many of the poisonous and highly concentrated remedies which are generally prescribed in drop doses are often nauseous to take when simply diluted with water or sugar and water, as they usually are by the patient or nurse; whereas if the physician would prescribe these remedies in combination with simple elixir, syrup of orange, Curaçoa cordial, compound tincture of cardamom and syrup, lemon syrup, etc., or even in mixture with any of the medicated waters and a little syrup, they would form very palatable and safe remedies. In such combination the medicinal ingredients may be so adjusted in the vehicle as to make the dose of the mixture a teaspoonful, two teaspoonfuls, or a tablespoonful, as the physician may desire.

When precision in dose is very necessary or desirable, even the spoonful dose is also rather uncertain and inaccurate, owing to the irregular size and variable capacity of the various kinds of spoons. The dessert-spoon of all others is perhaps the most objectionable and uncertain, and it is best for the physician to direct the dose of all active medicines to be taken in the dose of two teaspoonfuls instead of the dessert-spoonful. In fact, many persons can hardly recognize the difference between the tablespoon and the dessert-spoon, and often mistake one for the other. I have known this to be done frequently in taking medicine.

The graduated tumbler or medicine-glass is perhaps the most accurate and reliable means of measurement of medicinal doses that we have for domestic use; and I think that it would be well for physicians, in all lingering and chronic illnesses especially, to request their patients to procure one of these glasses, as they are certainly a very useful adjunct to the sick-chamber, and cost but a trifle.

Physicians, I have no doubt, often prescribe medicines in the form of drop doses from the force of habit, without ever thinking of the inaccuracy of that mode of administration, or of the inconvenience that medicine given in that form is likely to subject their patient to, or without even for a moment taking into consideration the real danger of sending into

the household such dangerous medicines as are often prescribed in that form.

ENGLISH PRESCRIPTIONS.—The following bills are now before the Legislature of this State:

Whereas, Grievous errors and mistakes have been made by druggists and others in the compounding of the prescriptions of physicians by reason of the same being heretofore written in the Latin tongue and in abbreviations thereof, as well as the quantities or proportions of the drugs or medicines being designated therein by figures or symbols in a mode not readily understood by the bulk of the people, whereby undue advantage and a mystification of the patients may be taken by unscrupulous doctors, druggists, and persons who prescribe or compound medicines for the sick and poor, and it being desirable to simplify the practice of medicine and to enable the public generally to better comprehend the names and nature of such drugs; therefore,

Section 1. *Be it enacted*, etc., That physicians and all other persons engaged in prescribing medicines or drugs for the sick shall write the names, quantities, and designations of the same plainly in the English language and without abbreviations; and a copy of such recipe or medicines so compounded by druggists, herbists, or any other persons shall be labelled or written on the outside of the bottles, vials, or packages containing the same.

Section 2. That any person violating the provisions of this act shall be guilty of a misdemeanor, and, on conviction before a magistrate, alderman, or justice of the peace of the county where such offence may be committed, shall be subject to a fine of twenty dollars for each offence, together with costs, and in default of payment to an imprisonment of not less than ten days or more than twenty days, at the discretion of the court.

Section 3. This act shall take effect immediately.

Whereas, Serious mistakes and confusion in the sale and compounding of medicines for the sick have occurred by druggists and others by reason of the names thereof being written or printed in the Latin tongue; therefore,

Section 1. *Be it enacted*, etc., That all druggists, vendors, or compounders of drugs, medicines, or herbs for the use of the sick are hereby required to label or print the names thereof conspicuously on the outside of the bottles, pots, or packages containing the same, in the English language, and without abbreviations.

Section 2. That any person violating the provisions of this act shall be guilty of a misdemeanor, and, on conviction before a magistrate, alderman, or justice of the peace of the county where such offence may be committed, shall be subject to a fine of ten dollars for each offence, together with costs, and in default of payment to an imprisonment of not

less than ten days or more than thirty days, at the discretion of the court.

Section 3. This act shall take effect immediately.

HEBRA'S SUCCESSOR.—The successor of Hebra is Professor Kaposi, who is well known to the profession by his various contributions to the literature of dermatology. A person of quick, nervous temperament, he combines a vast knowledge of his subject with the qualities of a brilliant lecturer and a good teacher. His class numbers more than that of any other teacher in his department.—*Cor. Cincinnati Lancet and Clinic.*

SCIENCE FOR THE YOUNG.—In a small manual for use in Manchester (England) schools we find the following, the standard being intended for children of eleven years, of the poorer classes:

"Man is described by the zoölogist as standing at the head of the animal kingdom. He is described as forming the only species in the order Bimana (two-handed animals), of the class Mammalia (suck-giving animals), of the sub-kingdom Vertebrata (backboned animals). He is further described as breathing atmospheric air by means of lungs; as possessing warm red blood, driven into circulation through his body by the action of a double heart, possessing two ventricles and two auricles; as producing living young, and nurturing them by means of milk secreted by the mammary glands; his skin more or less covered with hairs and scales; as possessing two hands and two feet, each five-fingered, the nails at their extremities flat and broad; and as possessing all his teeth even and close to one another, and his molar teeth equally enamelled."

"This is pretty well," says the *Saturday Review*; "and we only hope that the eleven-year-olds will not be led by the metaphorical expression at the opening to conceive the idea of a groom standing at the head of a horse named Kingdom, and that no awkward mistakes will arise from the use of the masculine in describing the process of nurture. Youth is prone to such little errors when its brains are overdriven."

In the next standard the author explains scientifically the things of common life. Youths of twelve are quite ignorant of what jumping means. He tells them, "Jumping or leaping is effected (1) by the sudden contraction of the muscles of the calf, by which the heels are suddenly raised and the body jerked off the ground; (2) by the simultaneous contraction of muscles which bend the thigh on the pelvis; (3) by the sudden extension of the legs by the contraction of the extensor muscles, this movement following immediately on the two movements first described."

Obviously this lucid explanation will be of little use unless (as an instructor of youth who anticipated the method observed) "he goes

and does it." The joy of intelligent youth when for the first time it consciously contracts the muscles of its pelvis may possibly be a consolation for the trouble of learning. A young philosopher who can define himself as a person who nurtures his young, etc., and who knows that he jumps by contracting the muscles of his pelvis, is obviously ready for instruction in higher things still.

TO REMOVE FISH-BONES.—Fish-bones lodging in the pharynx are rendered flexible and are finally broken up by a mixture of hydrochloric acid (four parts) or nitric acid (one part to two hundred and forty parts of water) used as a gargle, the teeth being protected by oil or lard. So says Professor Vololini in *Monatsschrift für Ohrenheilkunde*.

SENTIMENTAL CHEMISTRY.—A French chemist is said to have condensed the body of his wife into the space of an ordinary seal, and had her highly polished and set in a ring. He made a nice income by betting with lapidaries and others that they could not tell the material of the set in three guesses, and, after pocketing the money, would burst into tears and say, "It is my dear dead wife. I wear her on my finger to keep alive pleasant remembrances of her."

ANECDOTE OF THIERRY DE HERY.—One day, while this once-famous syphilographer was sauntering through the crypts of St. Denis, paying little attention to the various royal tombs about him, he suddenly precipitated himself before an effigy and began to pray. The verger, who was standing near by, called out to him, "You mistake, sir: that is not a saint's tomb, but that of our late king, Charles VIII." "Simpleton," replied De Hery, "learn that the good king Charles VIII. is more than a saint to me, as he imported the pox from Italy, and has been my benefactor to the amount of thirty thousand pounds a year."—*Canada Lancet*.

COMPOUND ELIXIR OF CHLOROFORM.—Dr. W. F. McNutt, in the *Western Lancet* for August, 1880, recommends the following formula as a substitute for chlorodyne:

R Muriate of morphia, gr. ss;
Hydrate of chloral, 3ss;
Chloroform, 3ss;
Tinct. of cannabis indica, ℥xx;
Tinct. of capsicum, ℥xx;
Hydrocyanic acid, dil., ℥xx;
Essence of peppermint, ℥x;
Comp. syrup of sarsaparilla, 3j.

Mix. Dose, one drachm.

This he has named "Elixir Chloroformi Compositus."

PRACTICAL PHYSIOLOGY.—An old lady who has several unmarried daughters feeds them on fish diet, because it is rich in phosphorus and phosphorus is the essential thing in making matches.—*Students' Journal*.

OBITUARY.—The *Obstetrical Journal of Great Britain and Ireland* terminated its existence at the end of last year.

HOFF'S MALT EXTRACT is a substance midway between an ordinary malt extract and a strong ale. Its effect upon the digestion of starch is said to be marked. In a series of experiments, Dr. J. J. Coleman, of Glasgow, found that Burton ale dissolved five per cent. of the starch; London porter, forty per cent.; Wrexham ale, twenty-six per cent.; the genuine Hoff's Malt Extract, sixty per cent.

THE TASTE OF CHLORAL, which to many persons is excessively disagreeable, may, it is said, be disguised by administering it in syrup of gooseberries, with the addition of a drop of chloroform to each grain of chloral.

FLUID EXTRACTS OF DIGITALIS AND COLCHICUM.—Dr. E. R. Squibb says that these are more eligible preparations than the tinctures. They are eight times as strong, and cost only half as much.

NEARLY two million pounds of horse-flesh are said to have been eaten last year in Paris.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM FEBRUARY 6 TO FEBRUARY 19, 1881.

BAILY, E. I., LIEUTENANT-COLONEL AND SURGEON.—The leave of absence granted him December 30, 1880, from A. G. O., extended one month. S. O. 35, A. G. O., February 11, 1881.

GIBSON, J. R., MAJOR AND SURGEON.—To accompany Battery A (Light) and Battery D, Second Artillery, from Fort McHenry, Md., to the United States Barracks, Washington, D.C., for temporary duty thereat. S. O. 26, Department of the East, February 11, 1881.

LIPPINCOTT, H., CAPTAIN AND ASSISTANT-SURGEON.—Upon expiration of present leave of absence, to report in person to Commanding General, Department of the Platte, for assignment to duty. S. O. 34, A. G. O., February 10, 1881.

ELBREY, F. W., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty at Fort Bayard, N.M., and assigned to duty at Fort Union, N.M., relieving Assistant-Surgeon Kane. S. O. 31, Department of the Missouri, February 12, 1881.

BYRNE, C. B., CAPTAIN AND ASSISTANT-SURGEON.—To accompany Battery C, Second Artillery, from Fort Johnston, N.C. (abandoned), to Washington, D.C., and then proceed to Fort Barrancas, Fla., and report to the Commanding Officer of that post, for duty. S. O. 11, Department of the South, February 11, 1881.

HOFF, J. V. R., CAPTAIN AND ASSISTANT-SURGEON.—To accompany the four batteries of artillery from Fort Monroe, Va., as medical officer, to Washington, D.C. S. O. 27, Department of the East, February 11, 1881.

FINLEY, J. A., CAPTAIN AND ASSISTANT-SURGEON.—To accompany the battalion Third Artillery from New York Harbor, as medical officer, to the United States Barracks, Washington, D.C. S. O. 27, Department of the East, February 11, 1881.

REED, W., CAPTAIN AND ASSISTANT-SURGEON.—To accompany Battery I, Second Artillery, from Fort Ontario, N.Y. (abandoned), to Fort McHenry, Md., and then report by letter to these Headquarters for further orders. S. O. 25, Department of the East, February 9, 1881.

GARDINER, J. DE B. W., CAPTAIN AND ASSISTANT-SURGEON.—Relieved from duty in Department of Arizona, to proceed to Baltimore, Md., and, on arrival, report by letter to the Surgeon-General. S. O. 34, c. s., A. G. O.

KANE, J. J., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—When relieved by Assistant-Surgeon Elbrey, to proceed to and report for duty at Fort Bayard, N.M. S. O. 31, c. s., Department of Missouri.